

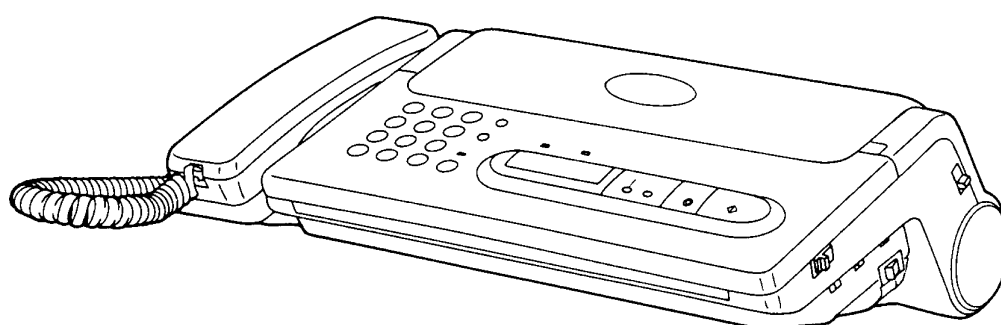
# Service Manual

## and Technical Guide

PERSONAL FACSIMILE

# KX-F76

(for Taiwan)



**SPECIFICATIONS\ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ**  
**MAINTENANCE ITEM\ТОЧКИ СЕРВИСНОГО ОБСЛУЖИВАНИЯ**  
**TROUBLESHOOTING GUIDE\НЕИСПРАВНОСТИ И МЕТОДЫ ИХ УСТРАНЕНИЯ**  
**DISASSEMBLY INSTRUCTIONS\МЕТОДИКА РАЗБОРКИ**  
**BLOCK DIAGRAM\БЛОК-СХЕМА**  
**OVERALL CIRCUIT DIAGRAM\СХЕМА СОЕДИНЕНИЯ ПЛАТ И УЗЛОВ**  
**SCHEMATIC DIAGRAMS\ПРИНЦИПИАЛЬНЫЕ СХЕМЫ**  
**CABINET, MECHANICAL AND ELECTRICAL PARTS LOCATION\РАСПОЛОЖЕНИЕ**  
**ЧАСТЕЙ КОРПУСА, МЕХАНИЧЕСКИХ И ЭЛЕКТРИЧЕСКИХ ЧАСТЕЙ**  
**ACCESSORIES AND PACKING MATERIALS\ПРИНАДЛЕЖНОСТИ И УПАКОВочные МАТЕРИАЛЫ**  
**REPLACEMENT PARTS LIST\СПИСОК ЗАПАСНЫХ ЧАСТЕЙ**

# Panasonic

## SPECIFICATIONS

### 1. TRANSMISSION SECTION

Item		Description
1	Reading	CCD Image Sensor
2	Width of reading	252 mm (B4), 208 mm (A4)
3	Main scanning density	8 pels/mm
4	Side scanning density	3.85, 7.7, 15.4 line/mm
5	Synchronous form	Transmission Synchronism

### 2. RECEPTION SECTION

Item		Description
1	Reading	Thermal Recording
2	Size of recording paper	Standard 257×30 m roll paper (B4) 210×30 m roll paper (A4)
3	Width of recording	252 mm (B4), 208 mm (A4)
4	Main scanning density	8 pels/mm
5	Side scanning density	3.85, 7.7, 15.4 line/mm
6	Synchronous form	Transmission Synchronism

### 3. MODEM SECTION

Items		Description				
1	Transmission mode	V. 29		V. 27 ter		V. 21
2	Modulating method	16 Pt. QAM	8 Pt. QAM	8 Pt. PHM	4 Pt. PHM	FSK
3	Transmission speed (bps)	9600	7200	4800	2400	300
4	Modulating speed (Band)	2400	2400	1600	1200	300
5	Carrir frequency	1700		1800		f (A)=1850 f (Z)=1650
6	Detection method	Synchronizing detection		Synchronizing detection		FS
7	Tonal signal	2100 Hz (CED), 1100 Hz (CNG)				

#### 4. POWER SUPPLY SECTION

Items		Description
1	Input power supply	AC 110 V $\pm$ 10%      60 Hz
2	Insulation resistance	More than 10 M $\Omega$ between input power supply and earth
3	Power consumption	Standby                      8 W Transmission              18 W Reception                  30 W Copy                         35 W                      MAX 150 W
4	Output power supply	+5 V, +12 V, -12 V, +24 V

#### 5. ENVIRONMENT

Items		Description
1	Ambient air temperature	from 5°C to 35°C
2	Relative temperature	from 45% to 85%

#### 6. SIZE AND WEIGHT

Items		Description
1	Size	W: 391 mm, D: 233 mm, H: 115 mm
2	Weight	about 3.2 kg (Unit)

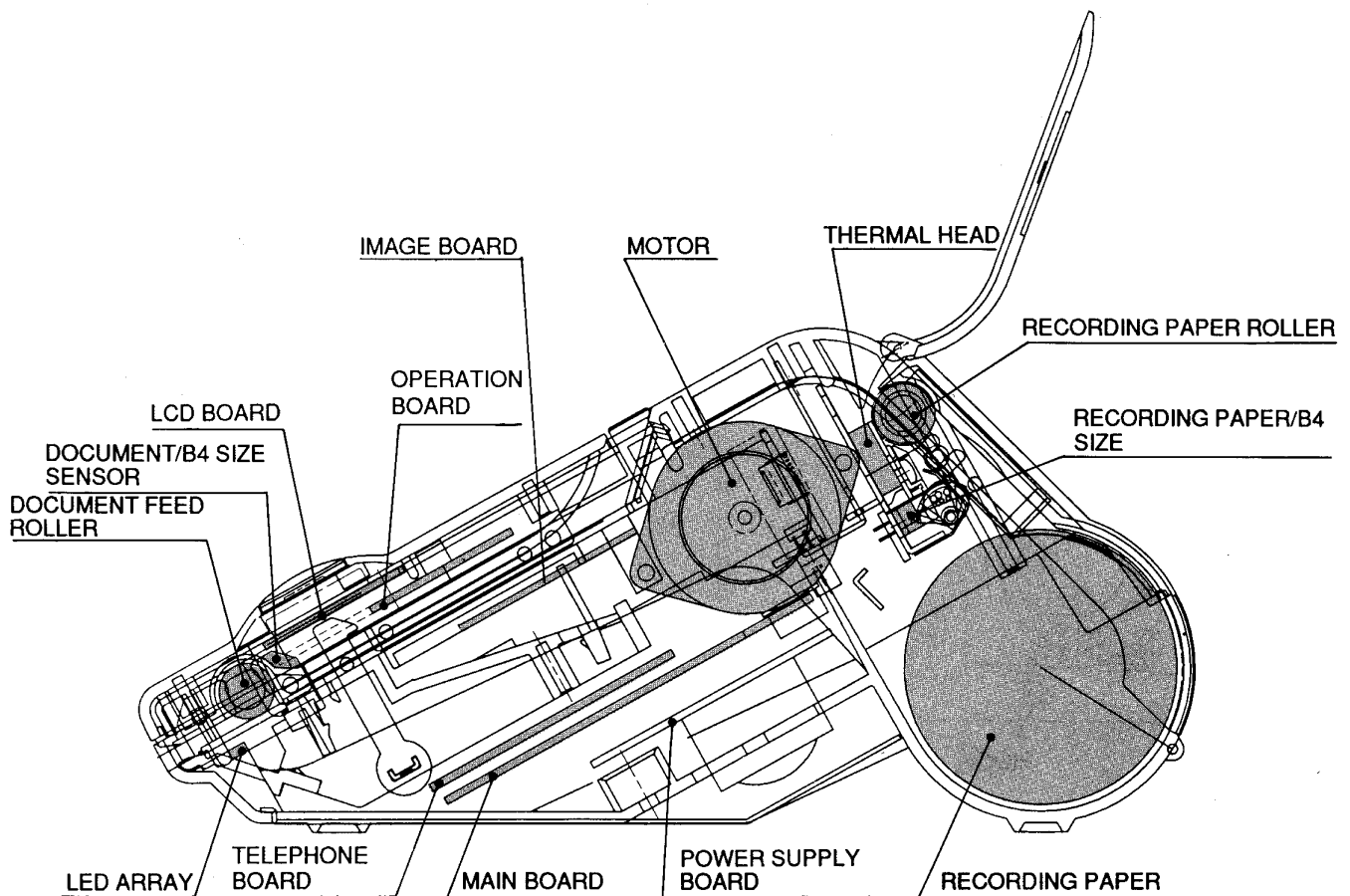
## MAINTENANCE ITEM

### 1. OUTLINE

MAINTENANCE AND REPAIRS ARE PERFORMED USING THE FOLLOWING STEPS.

- 1) **Periodic maintenance**  
Inspect the equipment periodically and if necessary, clean any contaminated parts.
- 2) **Check for breakdowns**  
Look for signs of trouble and consider how the problems arose.  
If the equipment can still be used, perform a copying, self testing or communications testing.
- 3) **Check equipment**  
Perform a copying, self testing and communications testing to determine if the problem originates from the transmitter, the receiver or the telephone line.
- 4) **Determine causes**  
Determine the causes of equipment trouble by troubleshooting.
- 5) **Equipment repairs**  
Repair or replace the defective parts and take appropriate measures at this stage to ensure that the problem does not recur.
- 6) **Confirm normal operation of the equipment**  
After completing the repairs, conduct copying, self testing and communications testing to confirm that the equipment operates normally.
- 7) **Record keeping**  
Make a record of the measures taken to rectify the problem for future reference.

### 2. MAINTENANCE CHECK ITEM





NO.	OPERATION	CHECK ITEM	REMARKS
1	Document Path	Remove any foreign matter such as paper.	—
2	Rollers	If the roller is dirty, clean it with a damp cloth then dry thoroughly.	See pages 22, 27.
3	Thermal Head	If the thermal head is dirty, clean the printing surface with a cloth moistened with denatured alcohol (alcohol without water), then dry thoroughly.	See page 27.
4	LED Array	If the LED Array is dirty, clean the glass with dry soft cloth.	See page 27.
5	Sensor & Switch	Recording Paper Sensor (PC301, 302), Document Sensor (PC201, 203), Confirm operation of sensor.	See pages 12–15.
6	Abnormal, wear and tear or looseness of parts	Exchange the part. Check the tightness of screws on each parts.	—

**Note:**

Print out the RAM data (user setting and service mode setting) in case an unexpected accident occurs during servicing.  
After servicing, print out the data again to confirm it.

## TROUBLESHOOTING GUIDE

### 1. SERVICE FUNCTION

#### 1-1. OPERATION

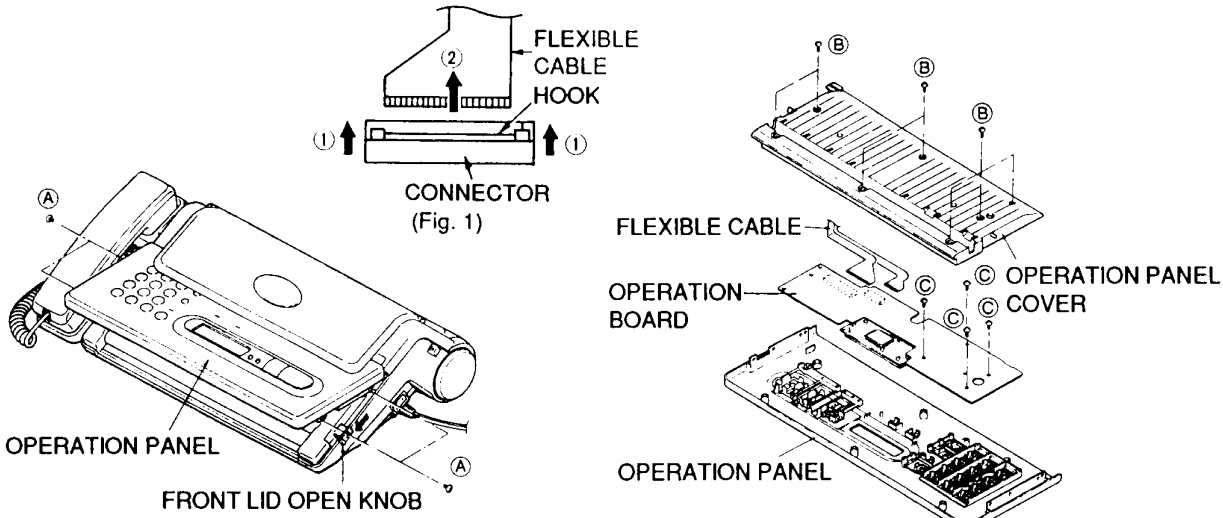
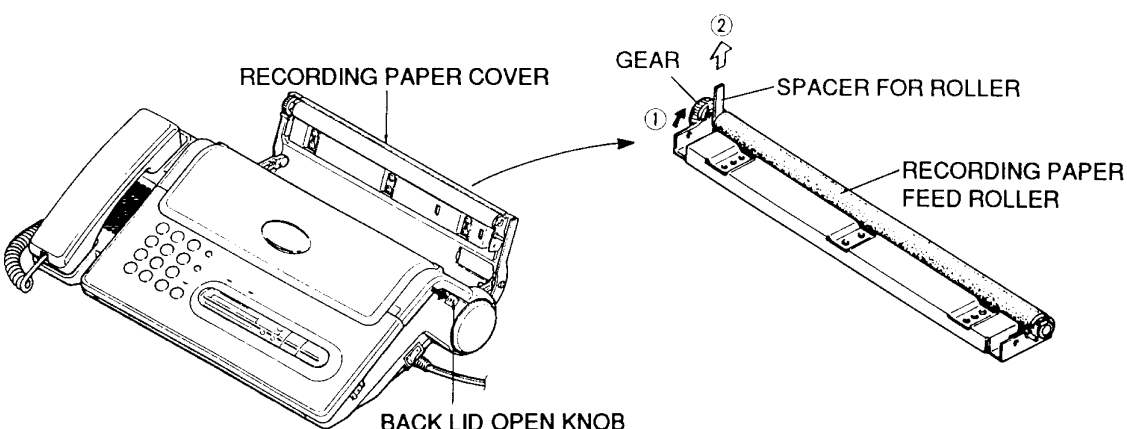
1. Set the FUNCTION Switch to ON.
2. Press The AUTO/ABSENCE and START/COPY button.
3. Select the Code No. (Press the RESOLUTION and AUTO/ABSENCE button.)
4. Press the START/COPY button.
5. Change the value. (Press the AUTO/ABSENCE button.)
6. Press the START/COPY button.
7. Set the FUNCTION Switch to OFF.

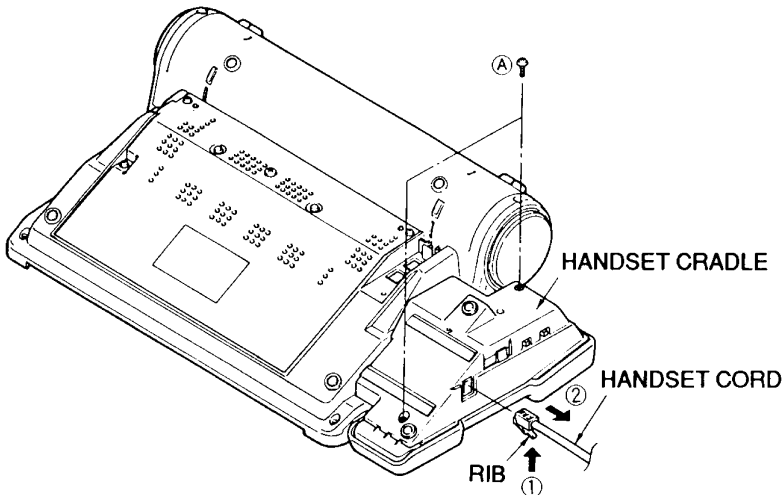
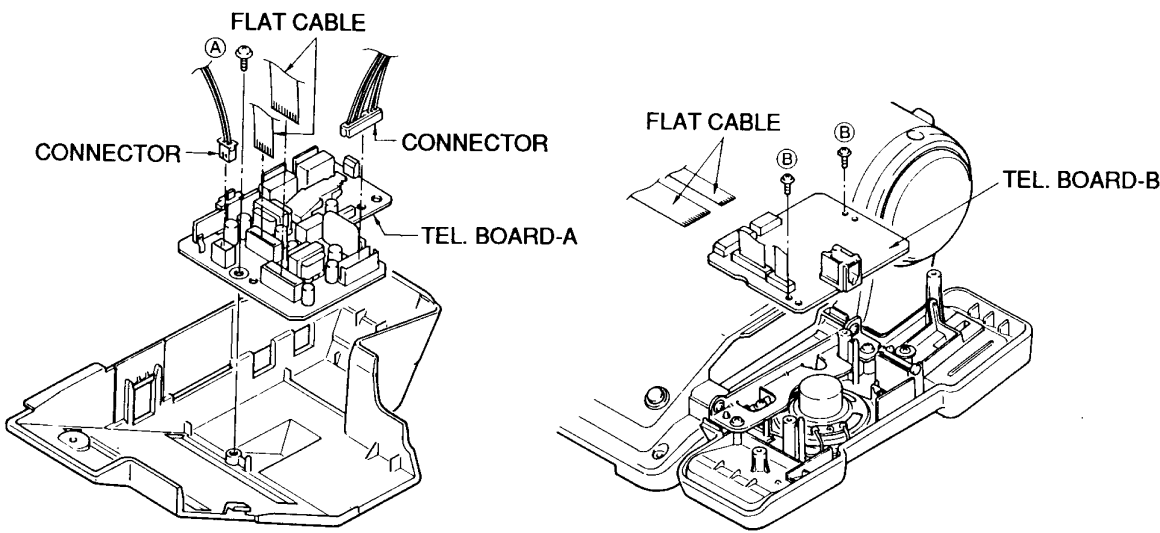
#### 1-2. SERVICE FUNCTION TABLE

CODE	FUNCTION	SELECTABLE VALUE (DEFAULT)	VALUE
500	SERVICE LIST	<b>YES</b>	<b>YES/OFF</b>
520	CED	2100Hz	2100 Hz/1100 Hz
521	INTL MODE	ON	ON/OFF
523	RCV EQ.	1.8Km	0.0/1.8/3.6/7.2
524	XMT EQ.	1.8Km	0.0/1.8/3.6/7.2
548	TSI SEND	ON	ON/CSI/OFF
549	CSI SEND	ON	ON/OFF
550	FACTORY SET	<b>NO</b>	<b>YES/NO</b>
551	ROM	F211A 38A3	
554	MODEM TEST	OFF	ON/OFF
555	SCAN CHECKTEST	OFF	ON/OFF
556	MOTOR TEST	OFF	ON/OFF
557	LED TEST	OFF	ON/OFF
558	LCD TEST	OFF	ON/OFF
559	DETECT JAM	ON	ON/OFF
563	CCD POSITION	-2mm	-4-3
575	OFFHOOK ALARM	ON	ON/OFF
586	W.L.SKIP1	ON	ON/OFF
587	W.L.SKIP2	ON	ON/OFF
588	SHORT PRCL	OFF	ON/OFF
592	CNG SIGNAL	ON	ON/OFF
593	CED INTVAL	75ms	75/500/1000
594	DIS IGNORE	ON	OFF/ON
595	ERROR LINES	96	32/64/96/128/160/192/224/255
596	XMT LEVEL	-10dBm	-15-0
597	XMT SPEED	AUTO	AUTO/9600/7200/4800/2400
705	ID PRINT	ON	ON/OFF
717	XMT START	9600bps	9600/4800
718	RCV START	9600bps	9600/4800
757	DTMF TIME	25ms	15/25/50/100
759	OGM TIME	10s	1-99
761	FAX DET. TIM	6.0s	3.8/4.5/6.0/9.0
770	ORIG. MODE	ON	ON/OFF
771	T1 TIMER	38s	38/48

CODE	FUNCTION	SELECTABLE VALUE (DEFAULT)	VALUE
772	PREAMBLE	1000ms	900/1000/1100
773	DIS-DCS	460ms	100/460/1000
774	LIGHT ORIG.	OFF	ON/OFF
780	REMOTE CODE	*9	00-*/of
783	ICM TIME	000s	000-999
785	BELL TEST	OFF	ON/OFF
786	RING BCKTONE	OFF	ON/OFF
787	COMM. TEST	OFF	ON/OFF
788	SHADING	OFF	ON/OFF

## DISASSEMBLY INSTRUCTIONS

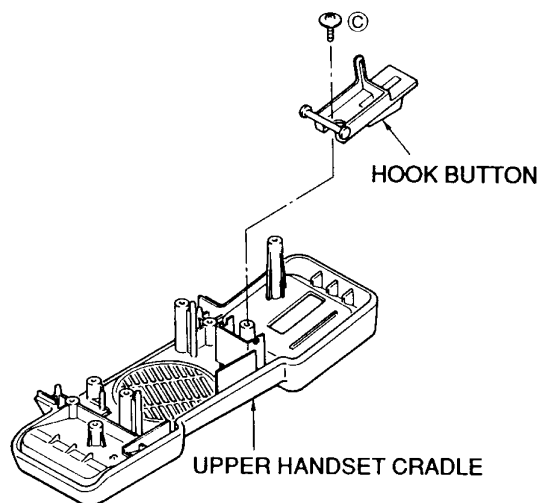
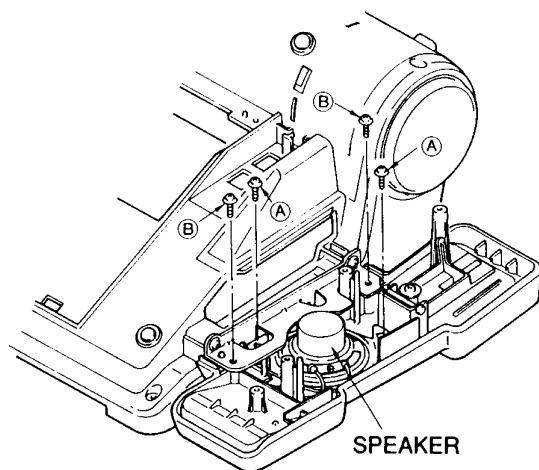
Ref. No. 1	<b>HOW TO REMOVE THE OPERATION PANEL AND OPERATION BOARD</b>	
Procedure 1	<ol style="list-style-type: none"> <li>1) Push the front lid open knob.</li> <li>2) Remove the four screws (A).</li> <li>3) Remove the seven screws (B).</li> <li>4) Remove the operation panel cover.</li> <li>5) Remove the four screws (C).</li> <li>6) Remove the operation panel and operation board.</li> <li>7) Remove the hook of connector then remove the flexible cable. (See Fig. 1.)</li> </ol>	
		
Ref. No. 2	<b>HOW TO REMOVE THE RECORDING PAPER FEED ROLLER</b>	
Procedure 2	<ol style="list-style-type: none"> <li>1) Push the back lid open knob.</li> <li>2) Remove the recording paper feed roller.</li> </ol>	
	 <p><b>Cleaning:</b> Clean the roller with a cloth soaked in alcohol.</p>	

Ref No. 3	<b>HOW TO REMOVE THE LOWER HANDSET CRADLE</b>	
Procedure 3	1) Remove the handset cord. 2) Remove the two screws (A). 3) Remove the lower handset cradle.	
		
Ref No. 4	<b>HOW TO REMOVE THE TELEPHONE BOARD</b>	
Procedure 3→4	1) Remove the two connectors. 2) Remove the two flat cables. 3) Remove the one screw (A). 4) Remove the telephone board-A.	
		

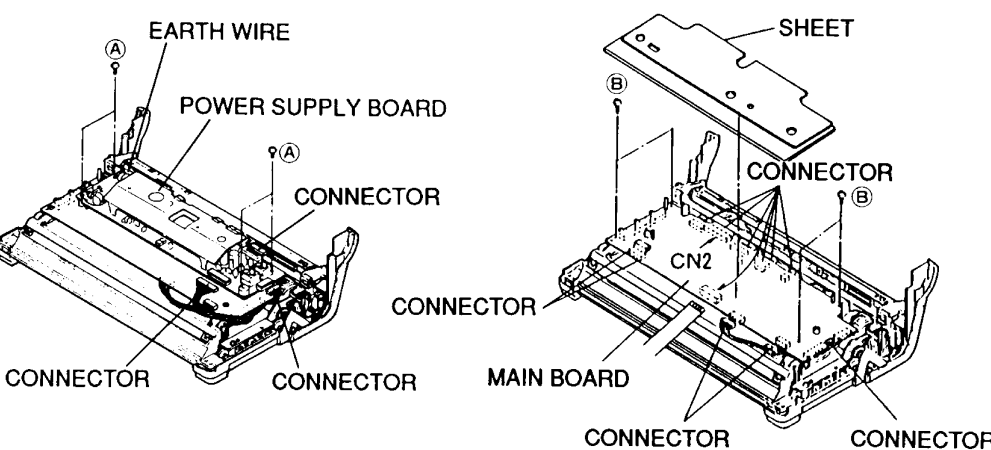
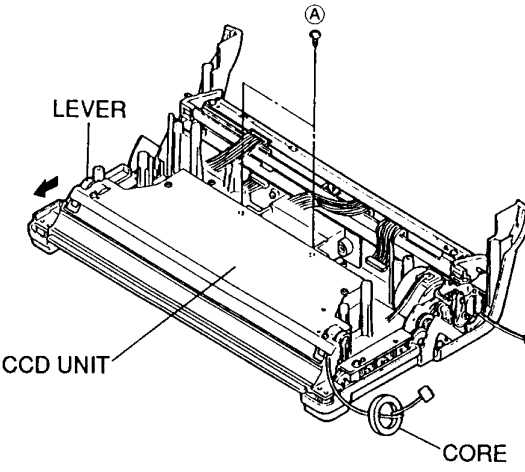
Ref. No. 5

**HOW TO REMOVE THE SPEAKER AND UPPER HANDSET CRADLE**Procedure  
3→4→5

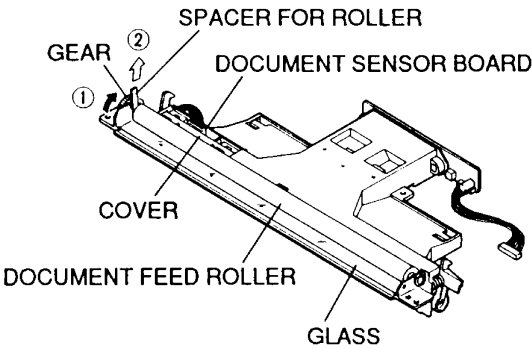
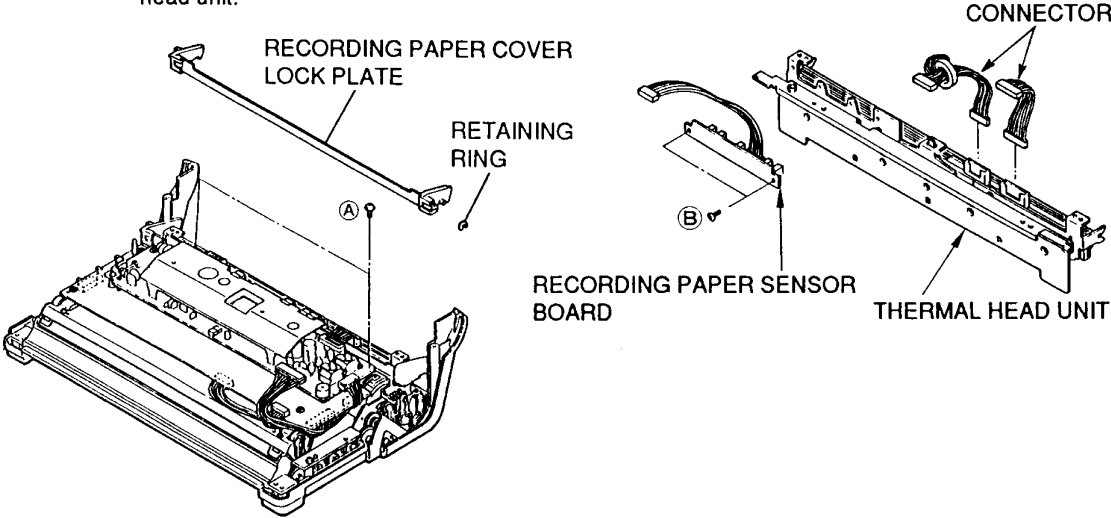
- 1) Remove the two screws (A).
- 2) Replace the speaker.
- 3) Remove the two screws (B).
- 4) Remove the one screw (C), and remove the hook button.
- 5) Replace the upper handset cradle.

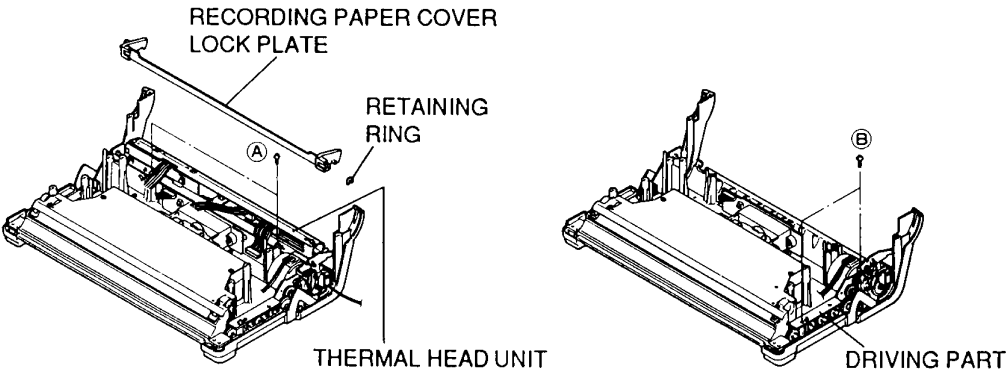
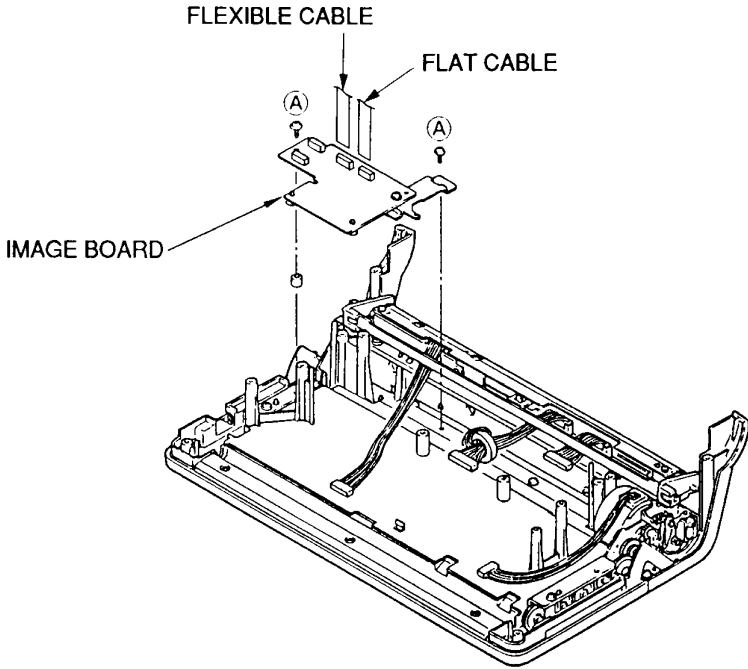


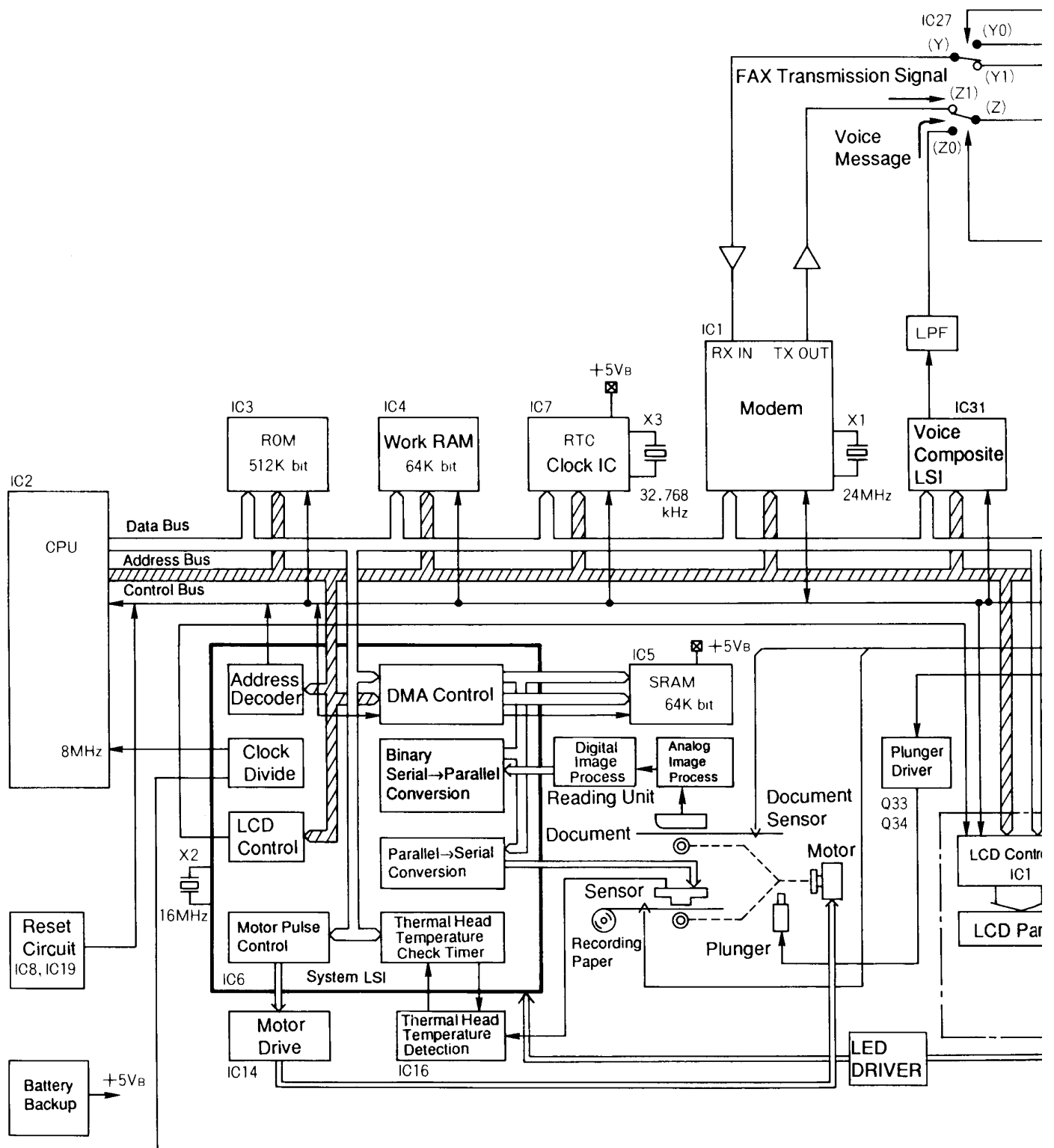
Ref. No. 6	<b>HOW TO REMOVE THE LOWER CABINET</b>
Procedure 3→4→5→6	<div data-bbox="352 360 1158 472"> <ol style="list-style-type: none"> <li>1) Open the recording paper cover. (See Ref. No. 2.)</li> <li>2) Remove the three screws (A).</li> <li>3) Remove the bottom plate.</li> <li>4) Remove the connector.</li> <li>5) Remove the six screws (B).</li> <li>6) Remove the lower cabinet.</li> </ol> </div> <div data-bbox="177 584 1305 1055"> </div>
Ref. No. 7	<b>HOW TO REMOVE THE RECORDING PAPER SENSOR LEVER</b>
Procedure 3→4→5→6→7	<div data-bbox="352 1234 815 1290"> <ol style="list-style-type: none"> <li>1) Remove the two screws (A).</li> <li>2) Replace the recording paper sensor lever.</li> </ol> </div> <div data-bbox="523 1413 1150 1850"> </div>

Ref. No. 8	HOW TO REMOVE THE POWER SUPPLY AND MAIN BOARDS	
Procedure 3→4→5→6→8	<ol style="list-style-type: none"> <li>1) Remove the four screws (A).</li> <li>2) Remove the four connectors.</li> <li>3) Remove the earth wire.</li> <li>4) Remove the power supply board.</li> <li>5) Remove the sheet.</li> <li>6) Remove the four screws (B).</li> <li>7) Remove the eleven connectors.</li> <li>8) Remove the main boards.</li> </ol>	
		
Ref. No. 9	HOW TO REMOVE THE CCD UNIT	
Procedure 3→4→5→6→ 8→9	<ol style="list-style-type: none"> <li>1) Remove the two screws (A).</li> <li>2) Remove the CCD unit by keeping the lever depressed in the direction of the arrow to replace the CCD unit. Remove the Document Sensor Board (refer to No. 10 on page 27) and the core from the old CCD unit and install it in the new one.</li> </ol>	
	 <p><b>Note:</b> Never subject the center part of the CCD unit to strong pressure.</p>	



Ref. No. 10	HOW TO REMOVE THE DOCUMENT FEED ROLLER AND DOCUMENT SENSOR BOARD	
Procedure 3→4→5→6→ 8→9→10	<p>(DOCUMENT FEED ROLLER)            1) Remove the document feed roller.</p> <p>(DOCUMENT SENSOR BOARD)            1) Remove the cover.            2) Remove the document sensor board.</p>  <p><b>Cleaning:</b>            Clean the roller and glass with a cloth soaked in alcohol.</p>	
Ref. No. 11	HOW TO REMOVE THE THERMAL HEAD UNIT AND RECORDING PAPER SENSOR BOARD	
Procedure 3→4→5→6→ 7→11	<p>1) Remove the retaining ring, and remove the recording paper cover lock plate.            2) Remove the two screws (A).            3) Remove the thermal head unit.            4) Remove the two connectors from thermal head unit.</p> <p>5) Remove the two screws (B), and remove the recording paper sensor board.            6) Install the new thermal head unit and the recording paper sensor board.</p>  <p><b>Cleaning:</b>            Clean the printing surface of thermal head with a cloth soaked in alcohol.</p>	

Ref. No. 12	HOW TO REMOVE THE DRIVING PART
Procedure 3→4→5→6→ 12	<div>1) Remove the retaining ring, and remove the recording paper cover lock plate.</div> <div>2) Remove the two screws (A).</div> <div>3) Remove the thermal head unit.</div> <div>4) Remove the two screws (B).</div> <div>5) Replace the driving part.</div> <div></div>
Ref. No. 13	HOW TO REMOVE THE IMAGE BOARD
Procedure 3→4→5→6→ 8→9→13	<div>1) Remove the flat cable and flexible cable.</div> <div>2) Remove the two screws (A).</div> <div>3) Remove the image board.</div> <div></div>



Fig



## Block Diagram

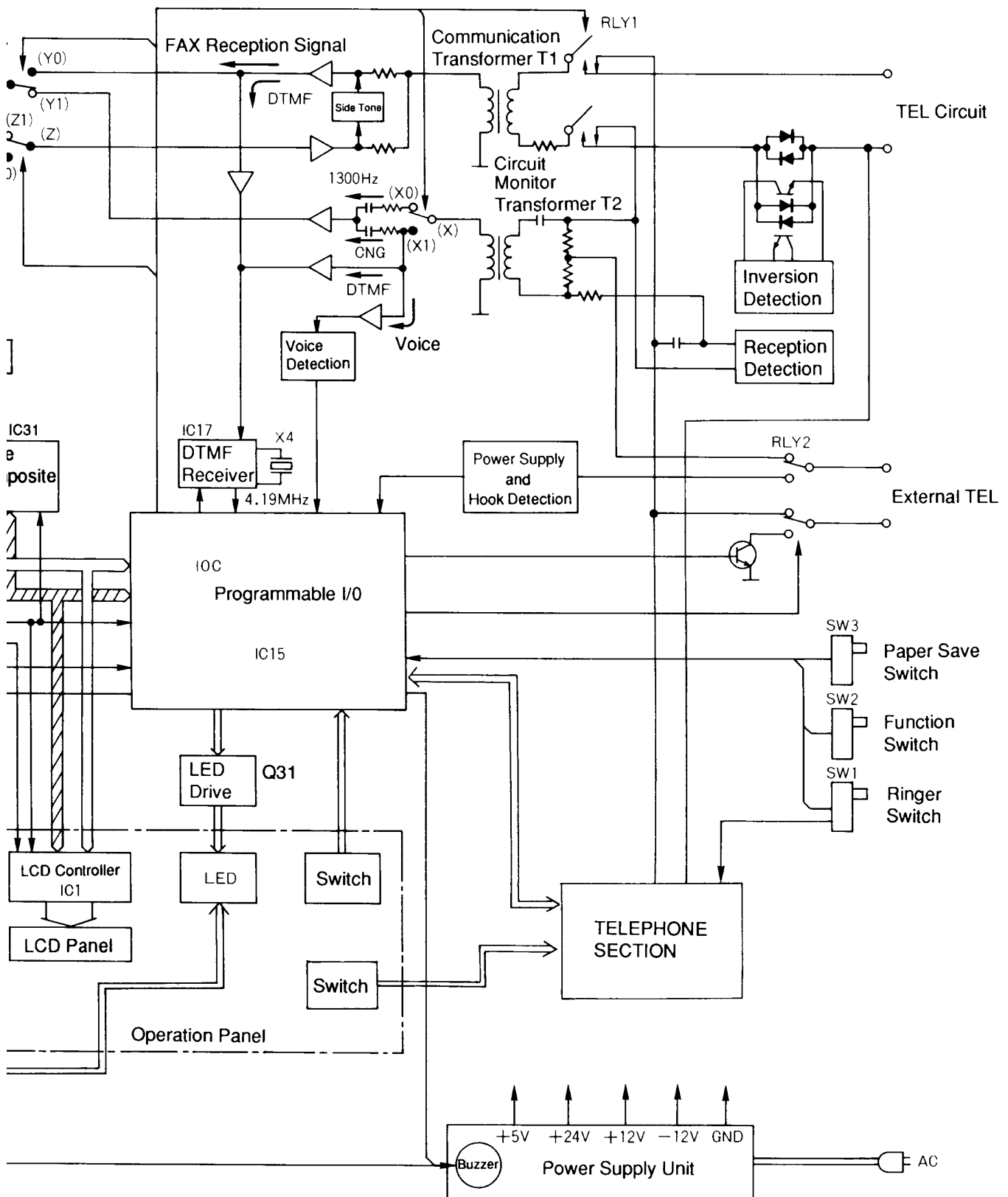


Fig. 1



## Overall Circuit Diagram

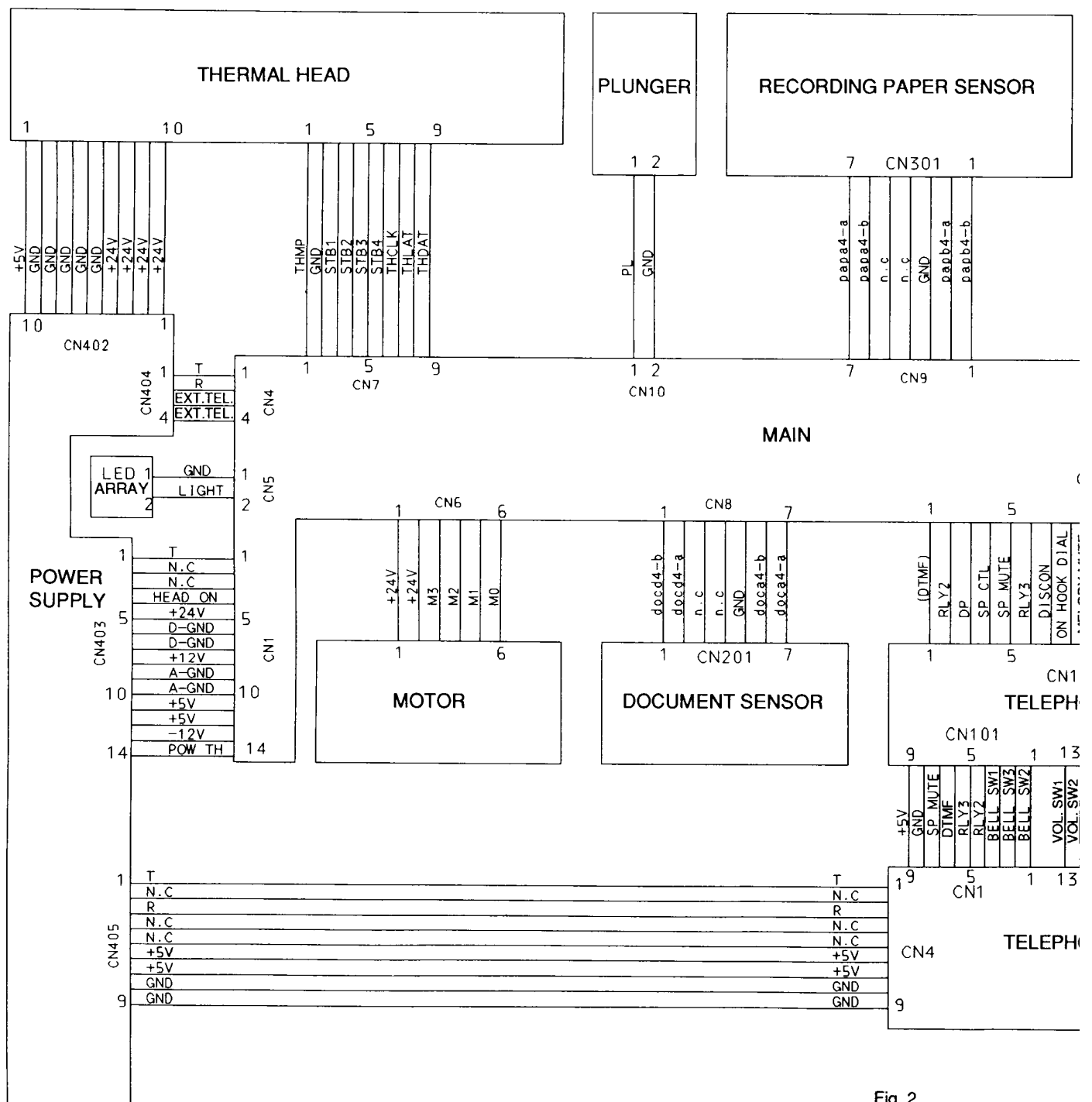
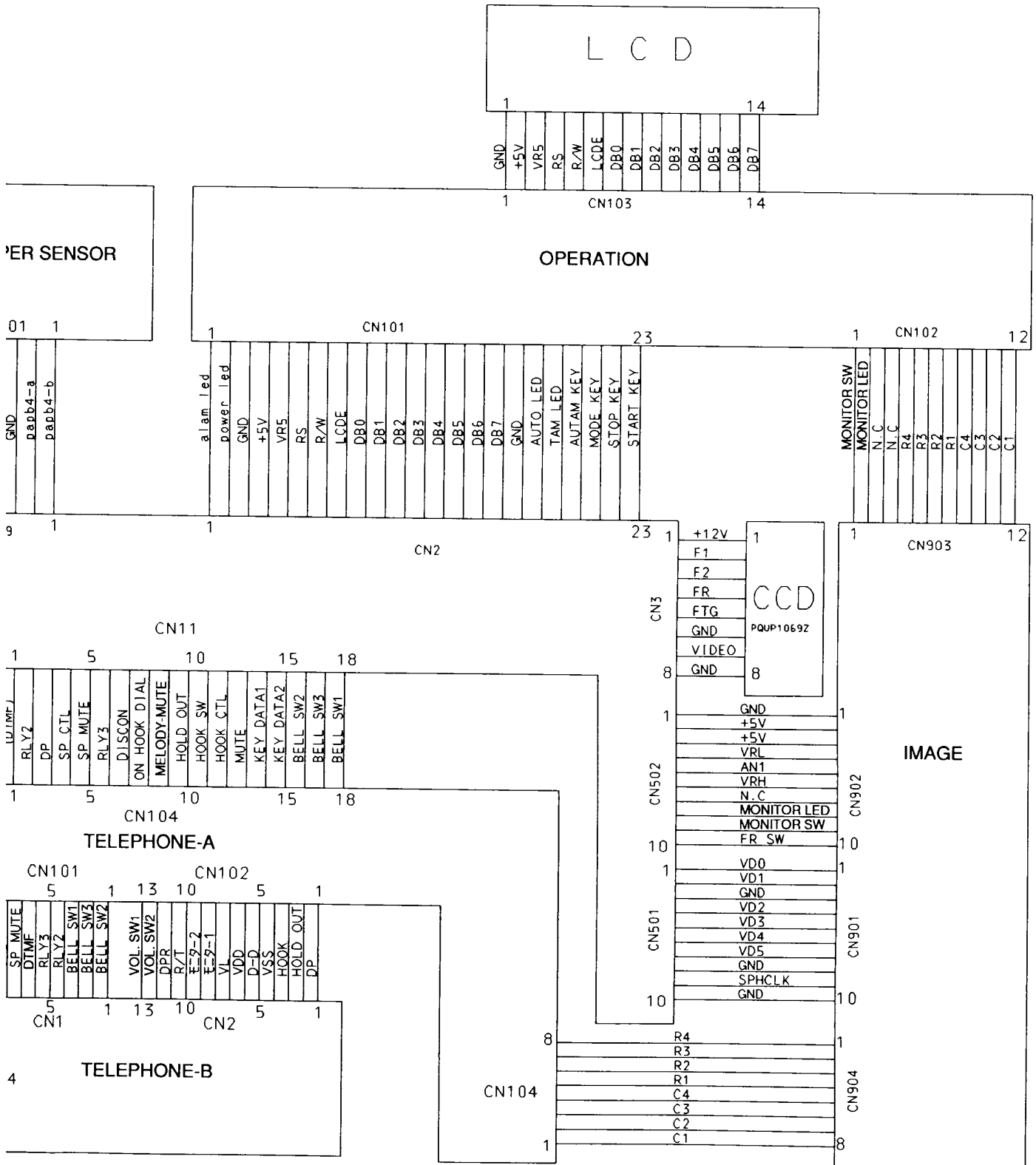


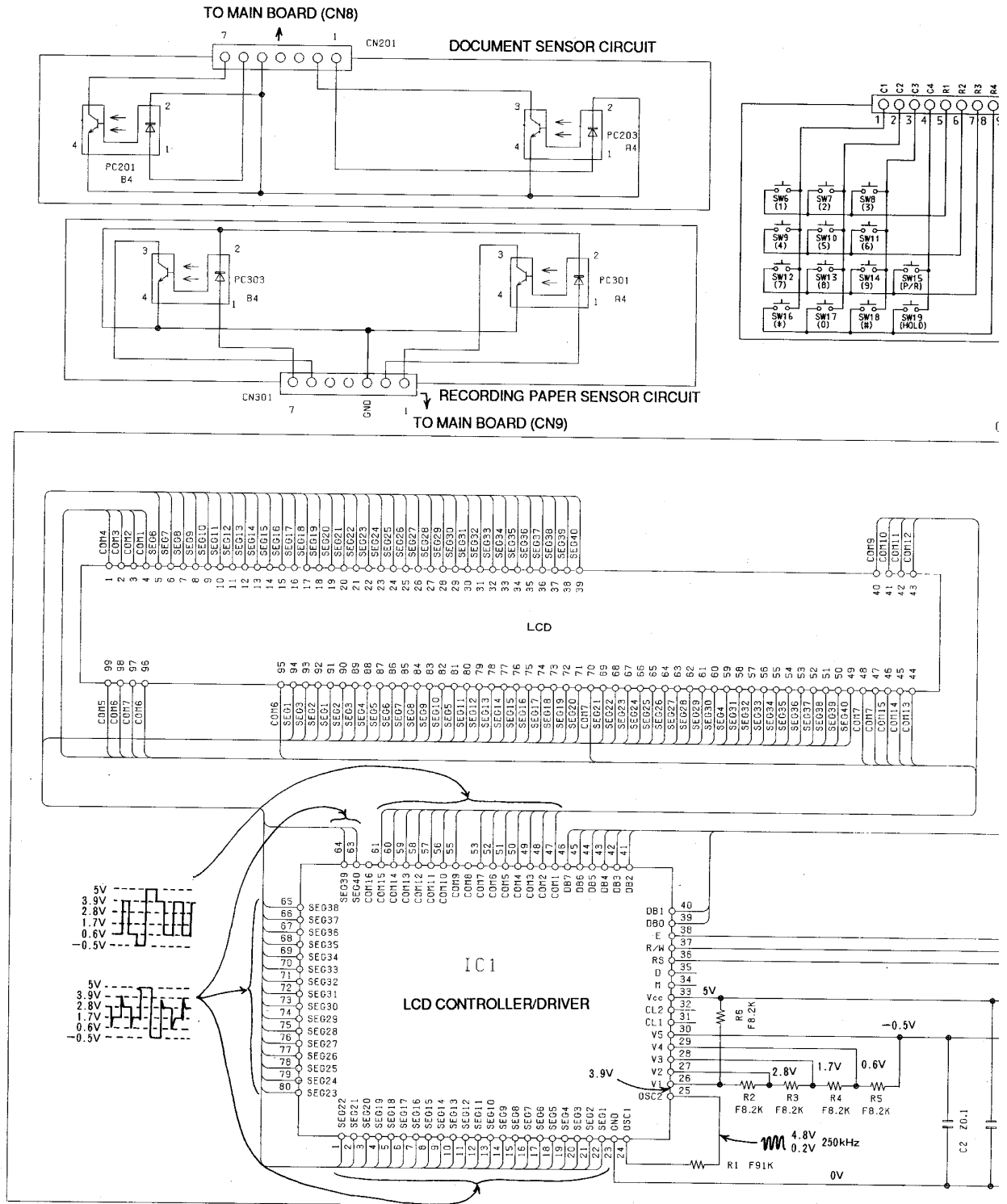
Fig. 2



II Circuit Diagram



## ■ OPERATION/LCD CIRCUIT

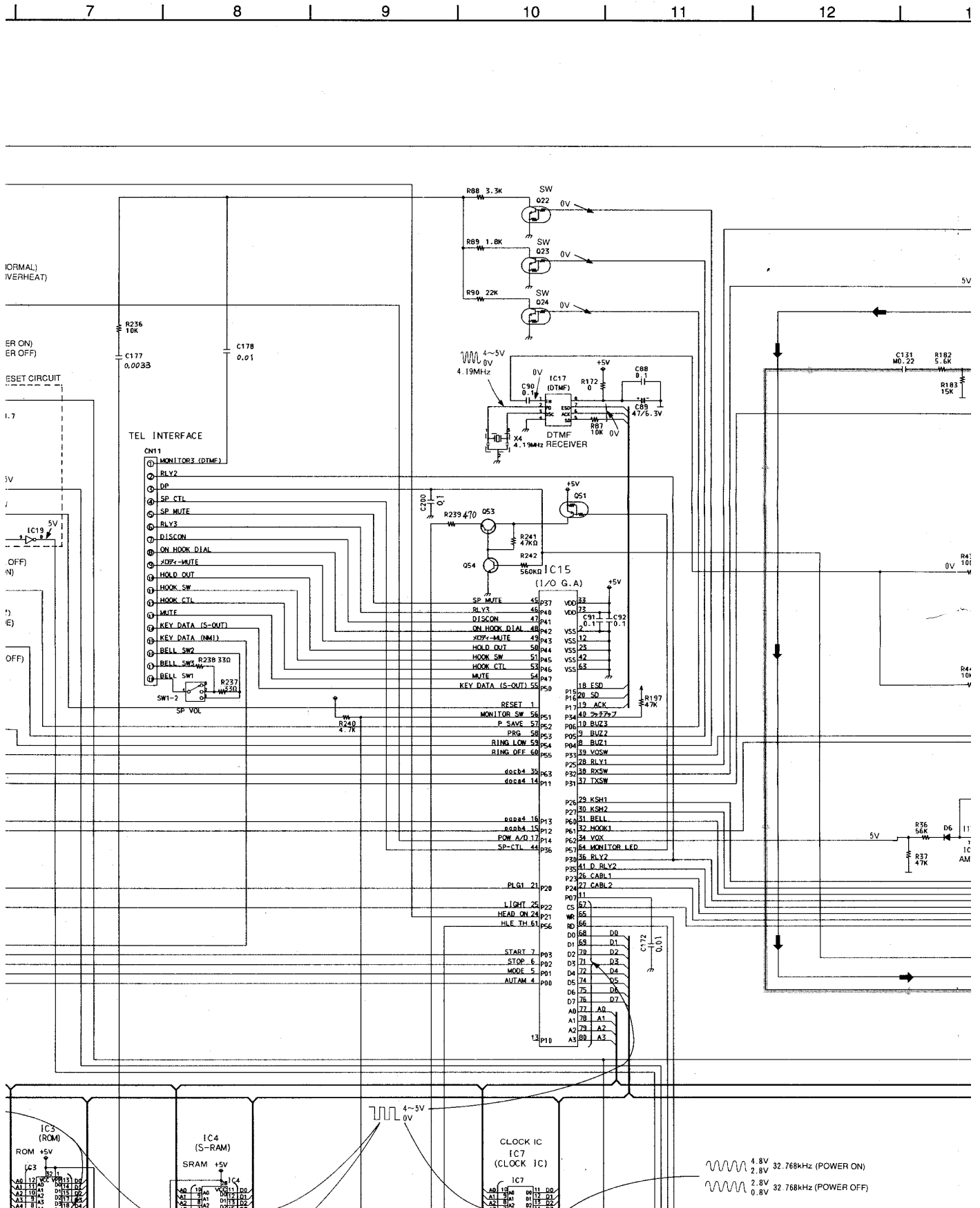


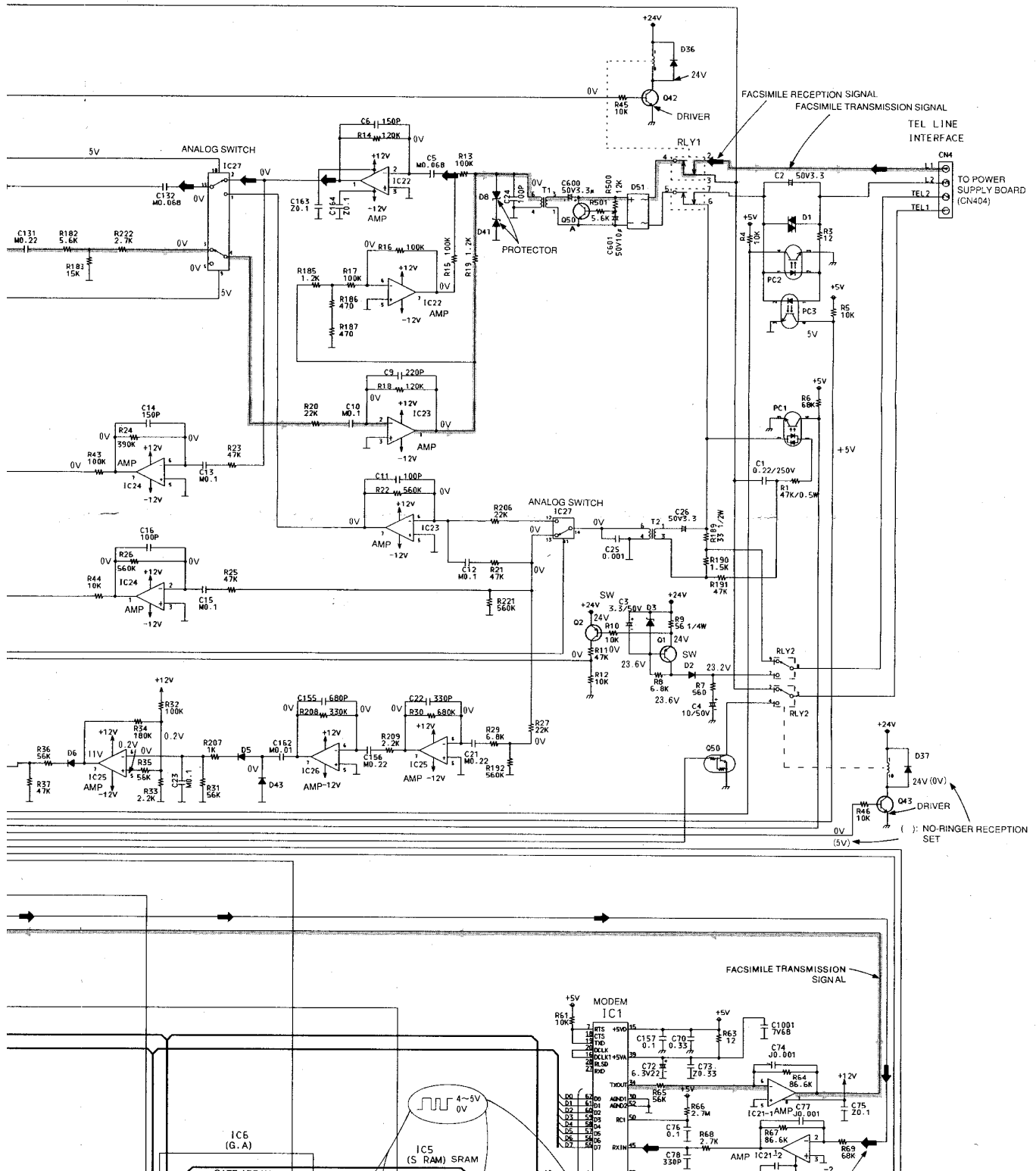




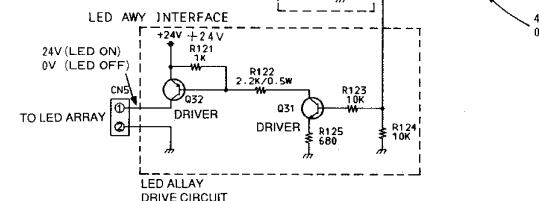
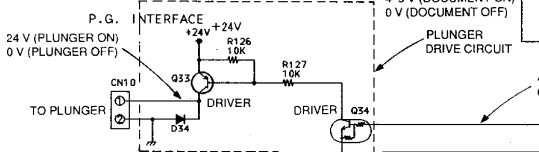
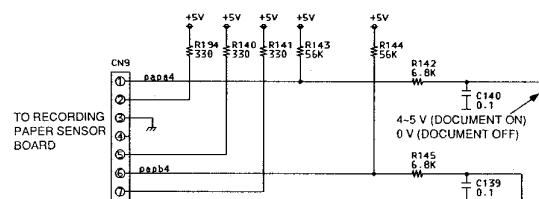


# SCHEMATIC DIAGRAM

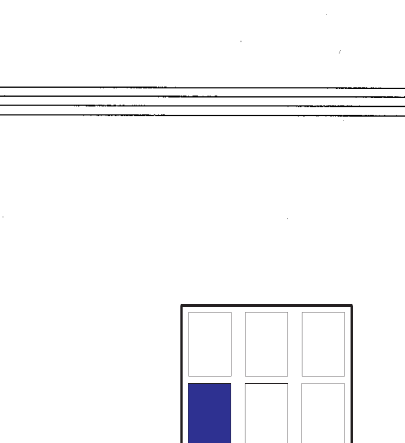
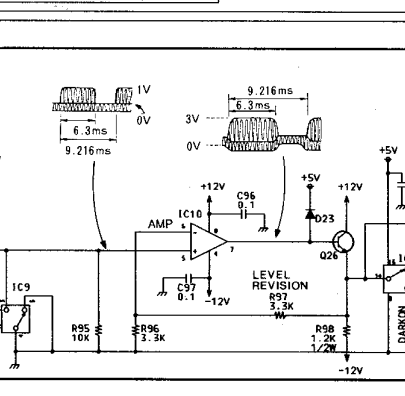
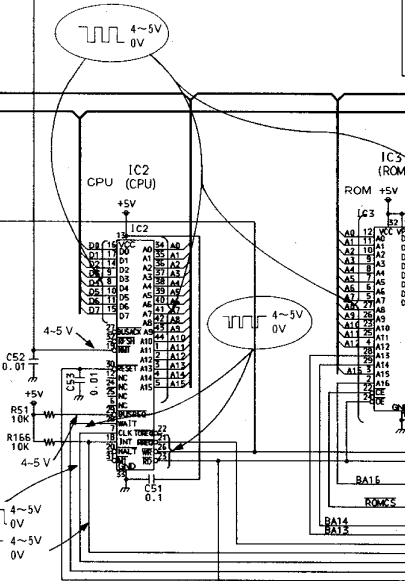
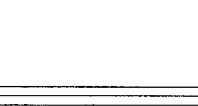
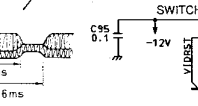
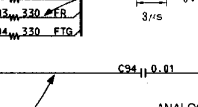
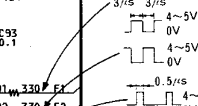
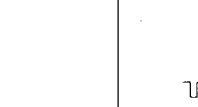
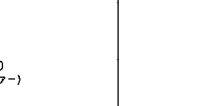
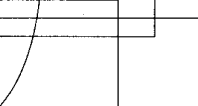
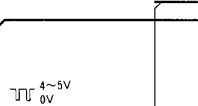
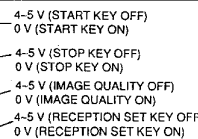
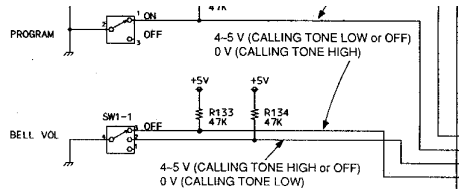
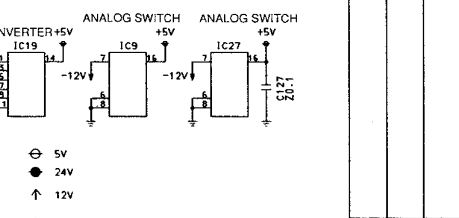
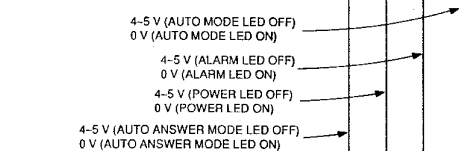
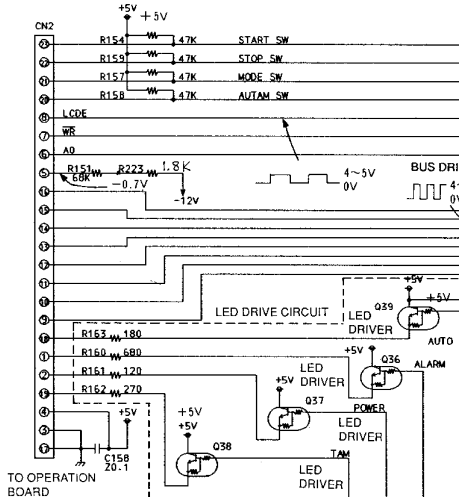




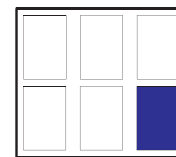
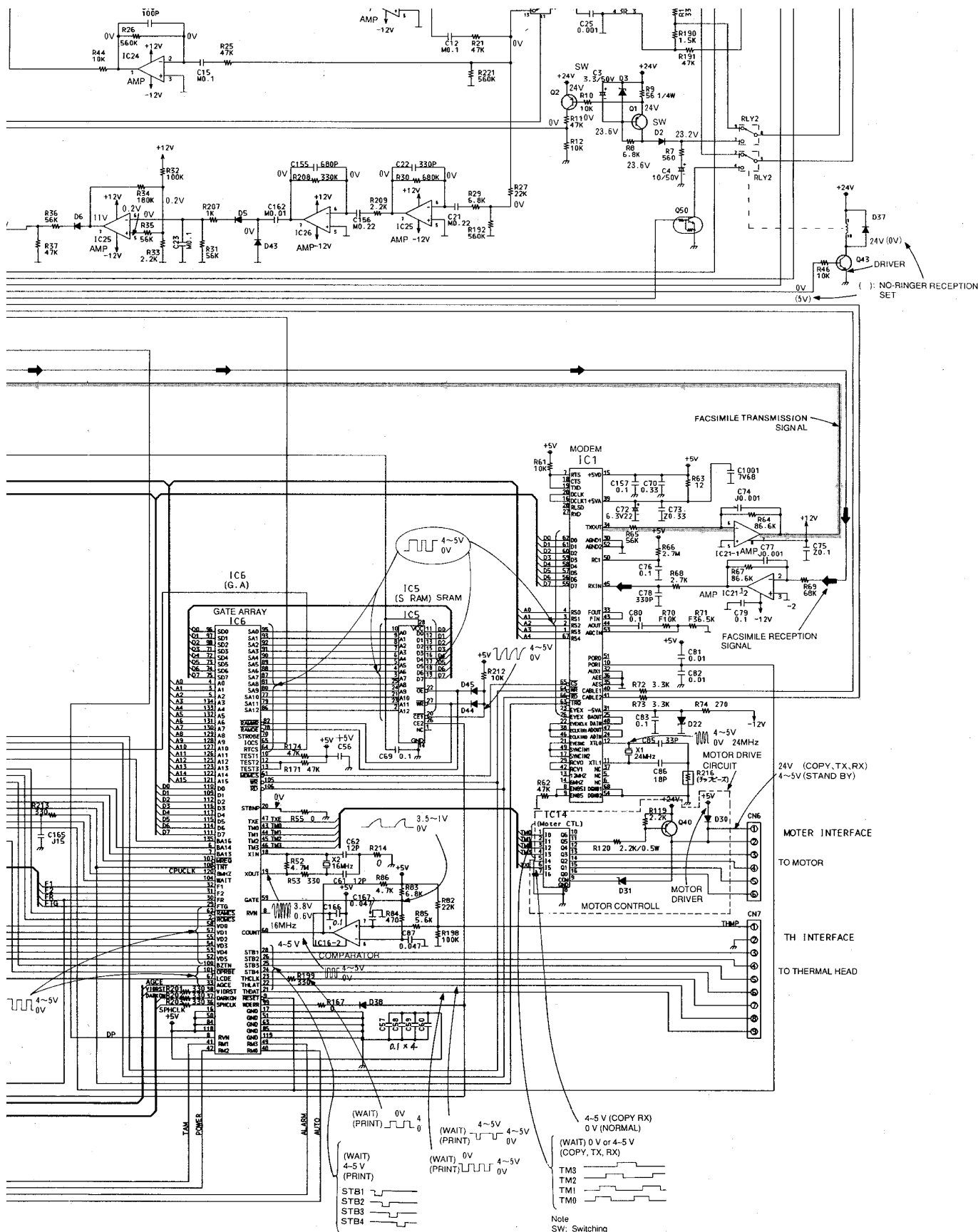
# PAPER SENSOR INTERFACE



## OPERATION INTERFACE

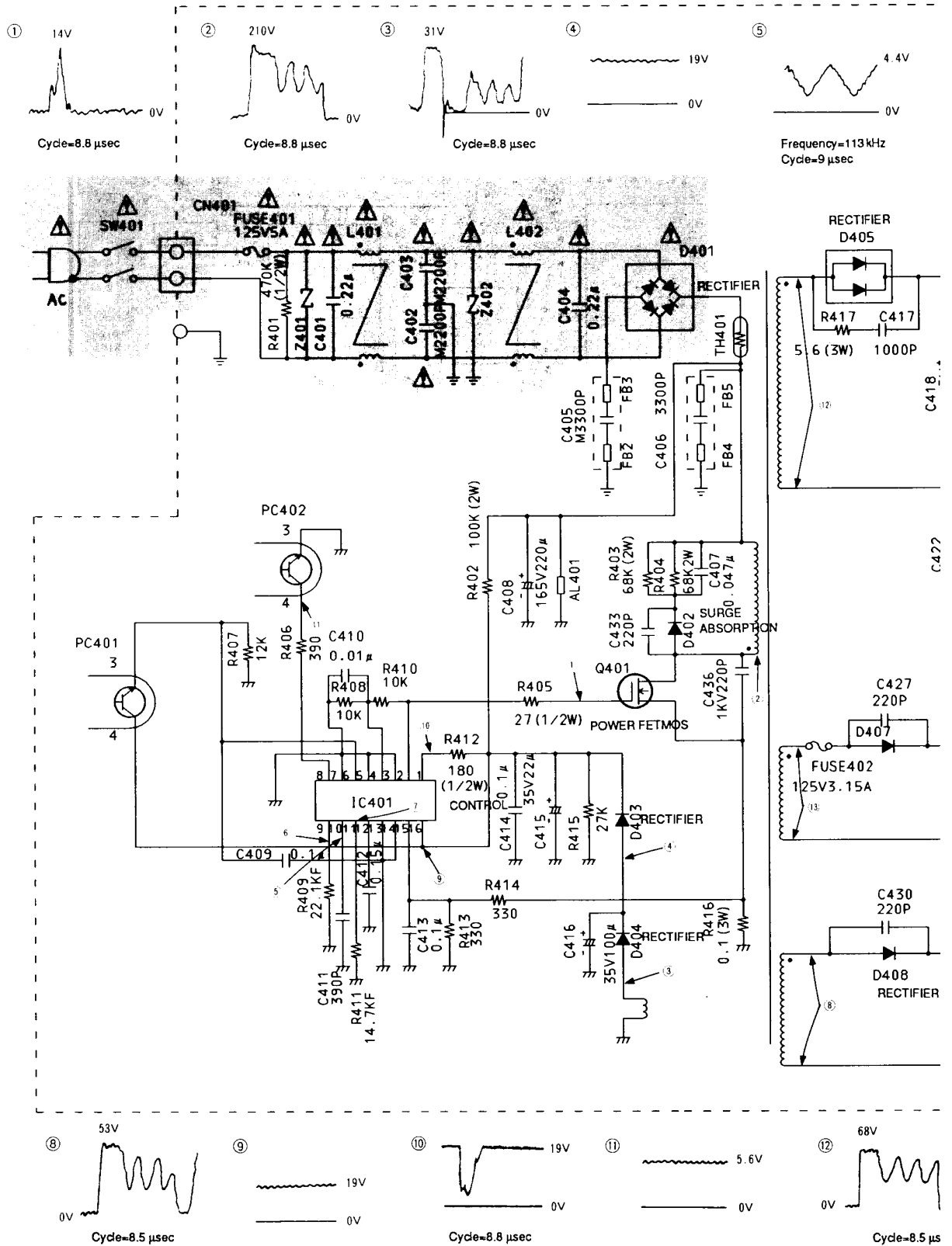






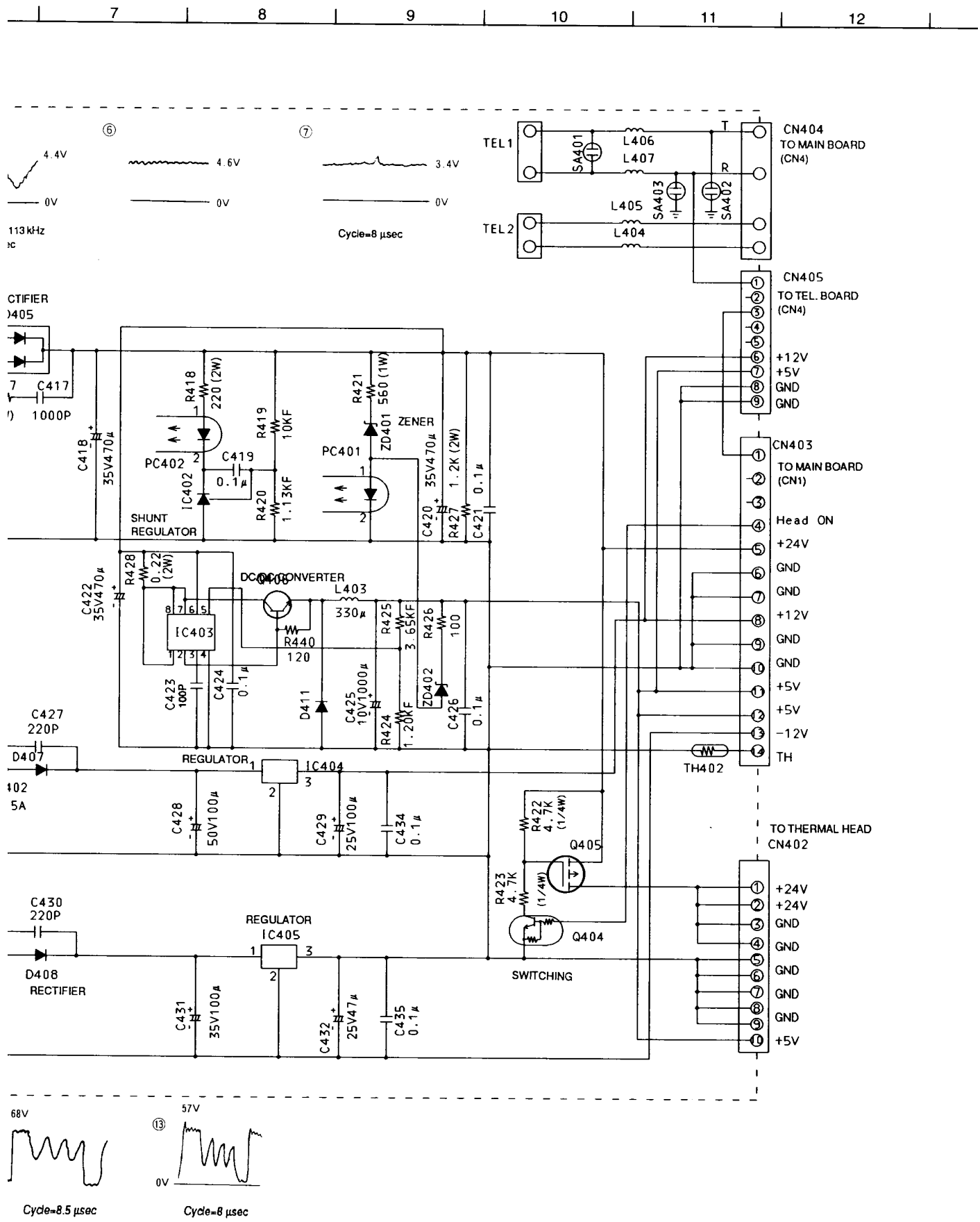
## SCHEMATIC DIAGRAM

## ■ POWER SUPPLY CIRCUIT





## C DIAGRAM

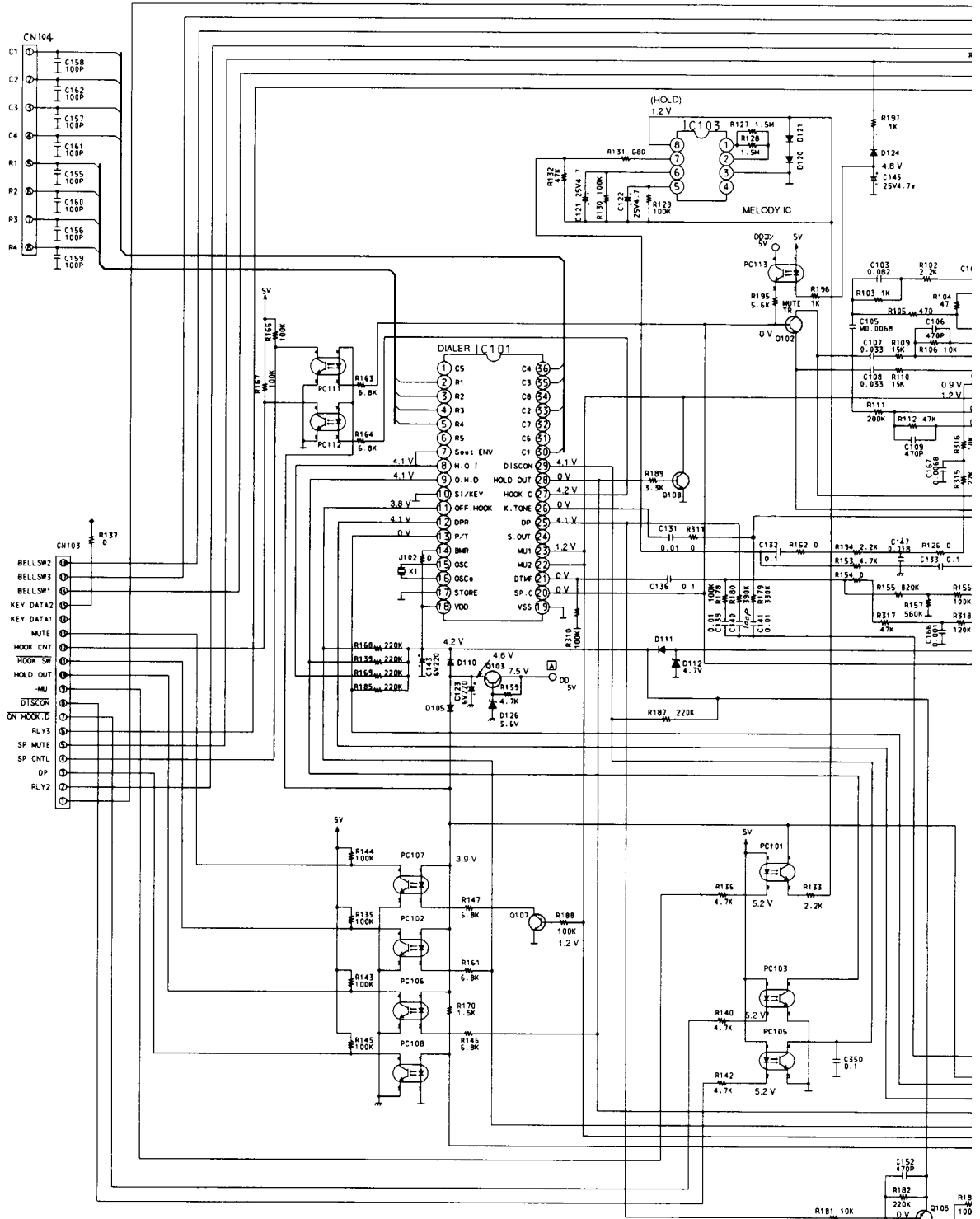




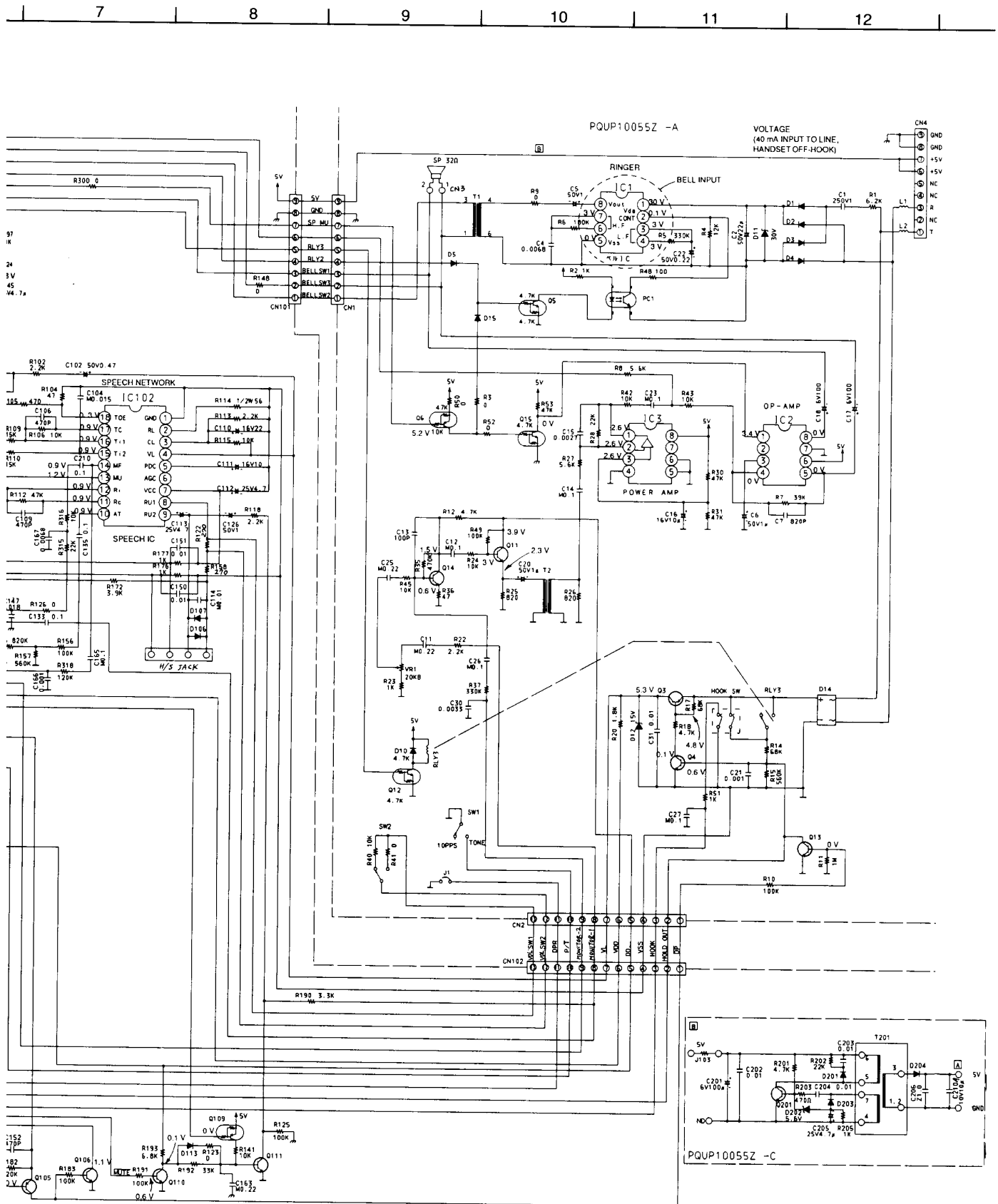
## SCHEMATIC DIAG

## ■ TELEPHONE CIRCUIT

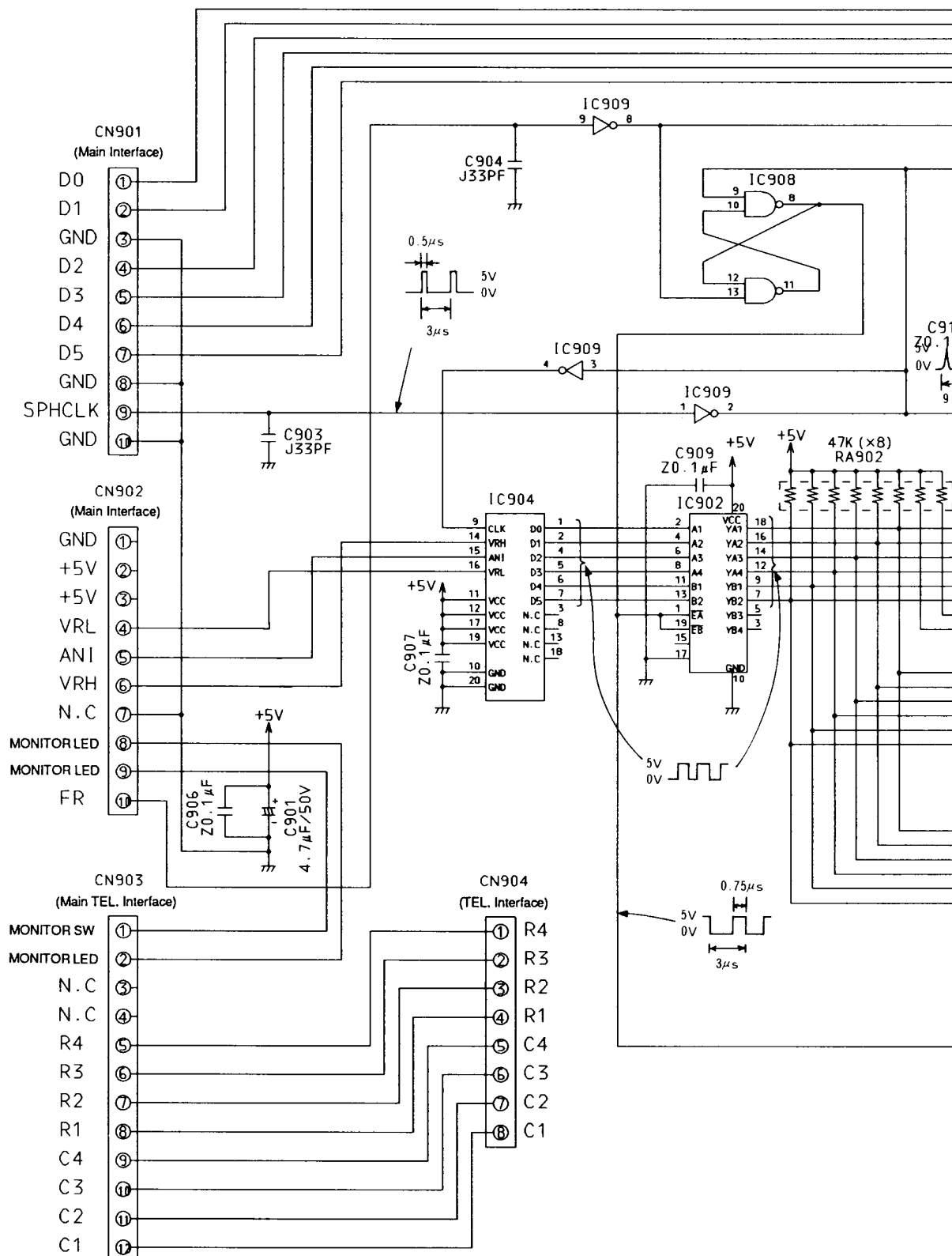
PQUP10055Z -B



## DIAGRAM

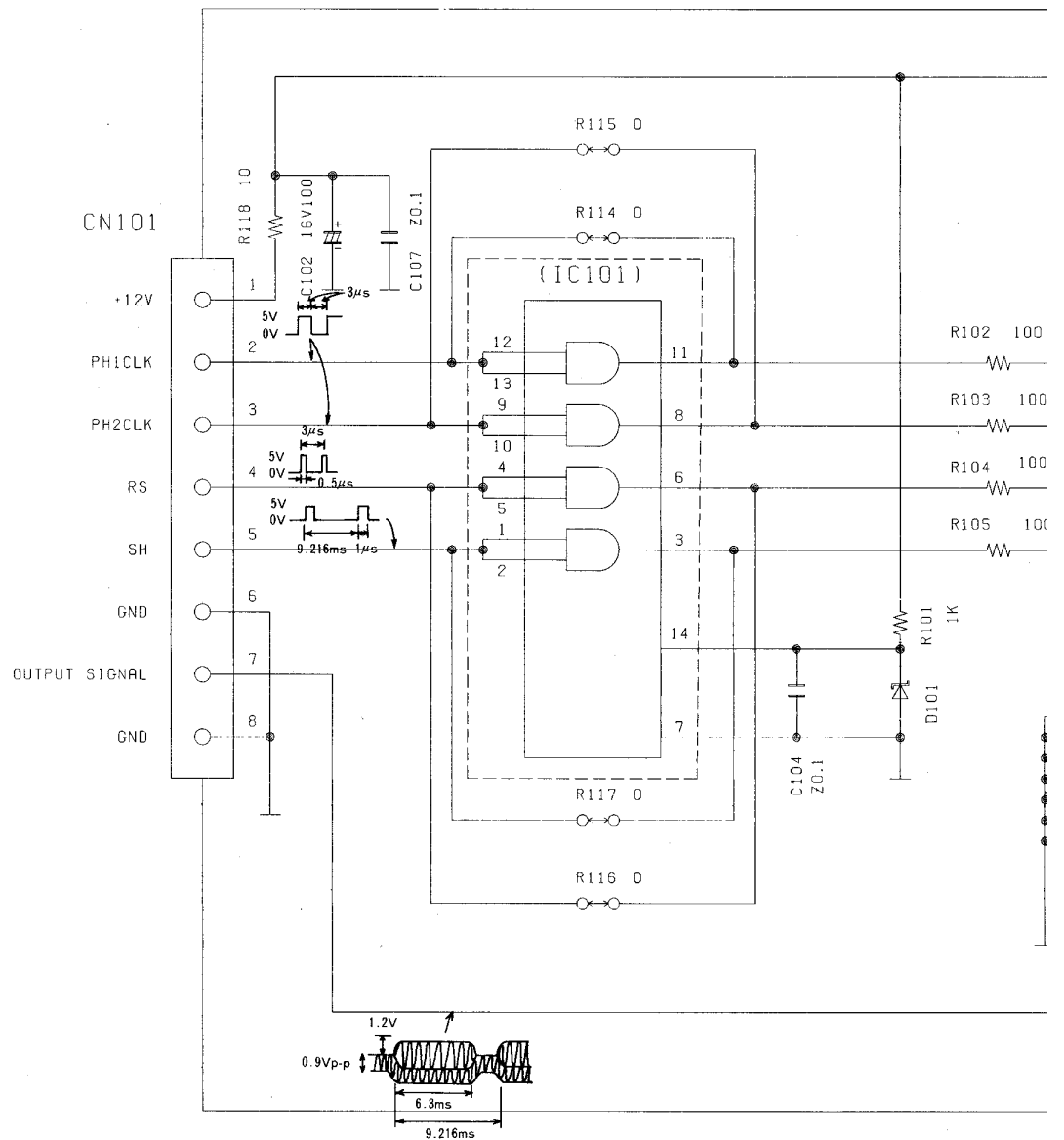


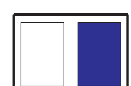
# ■ IMAGE CIRCUIT



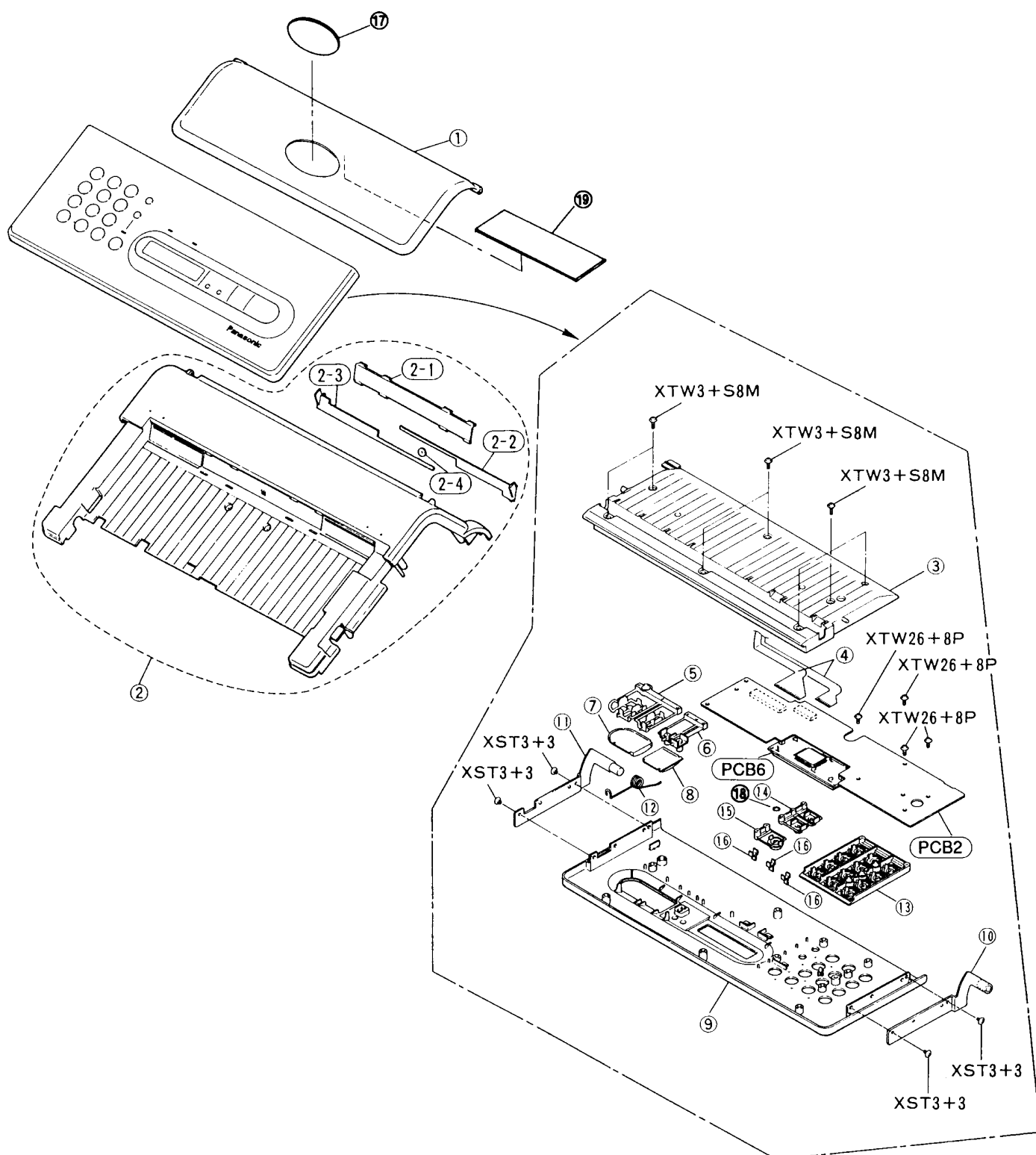


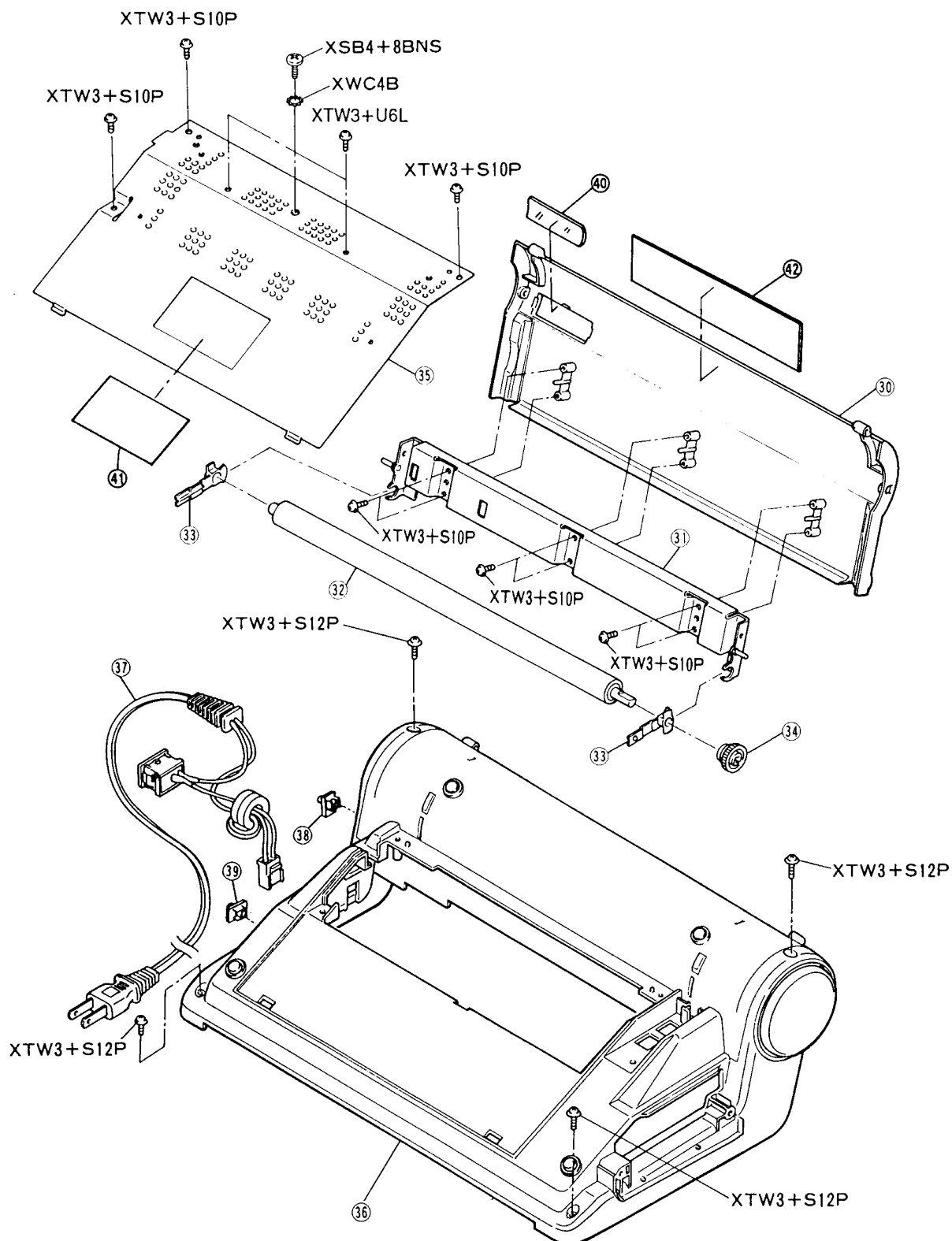
## ■ CCD CIRCUIT



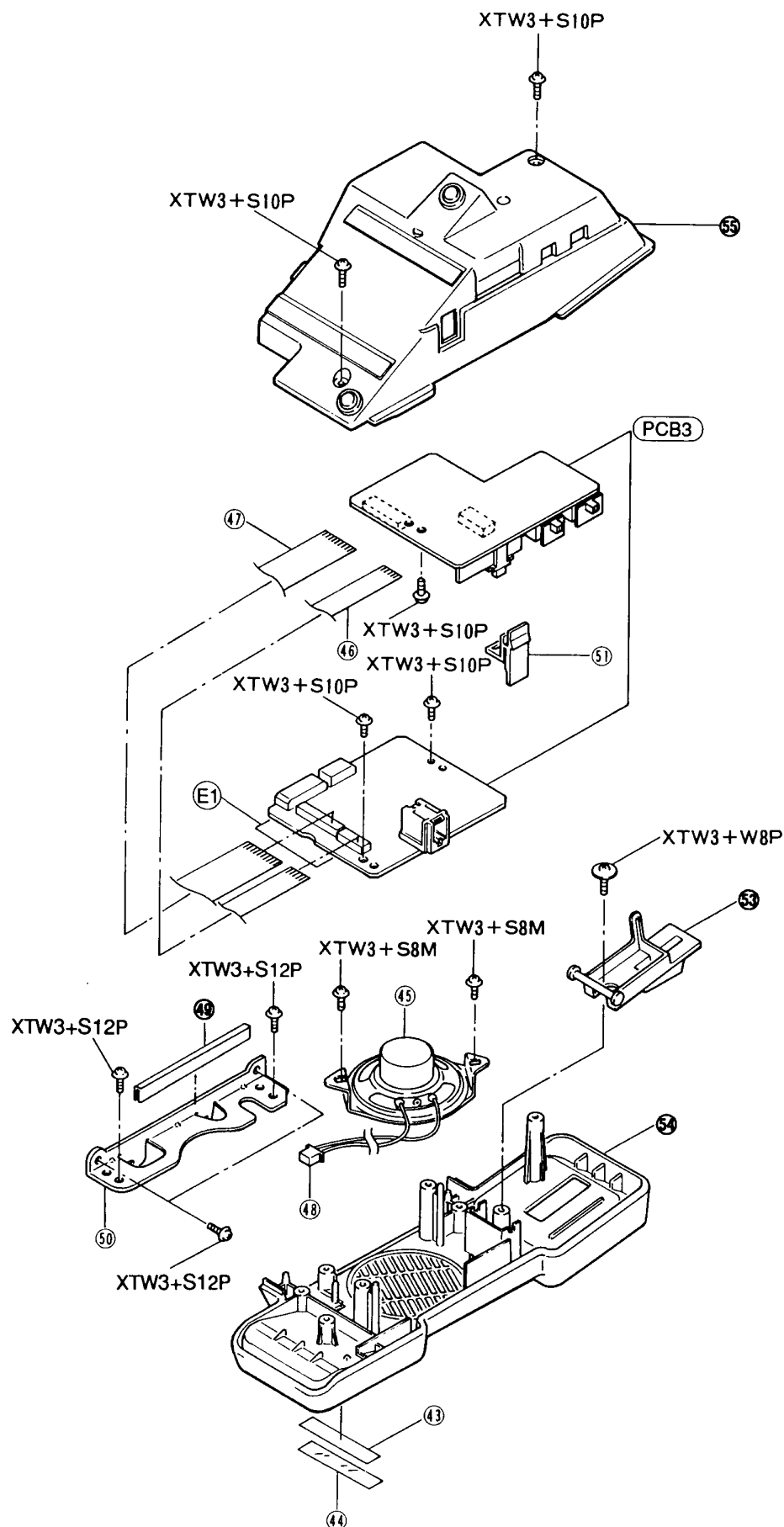


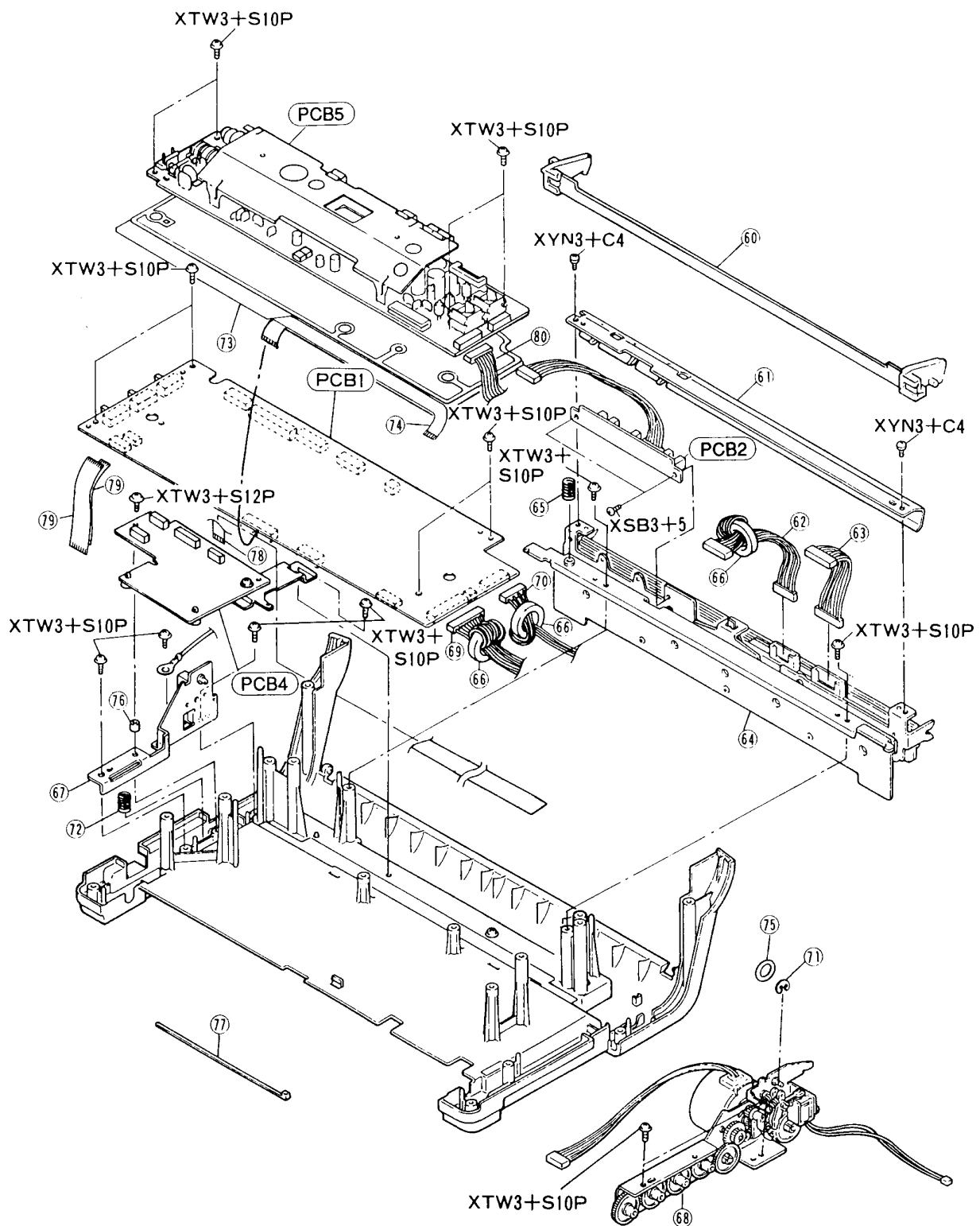
## CABINET, MECHANICAL AND ELECTRICAL PARTS LOCATION

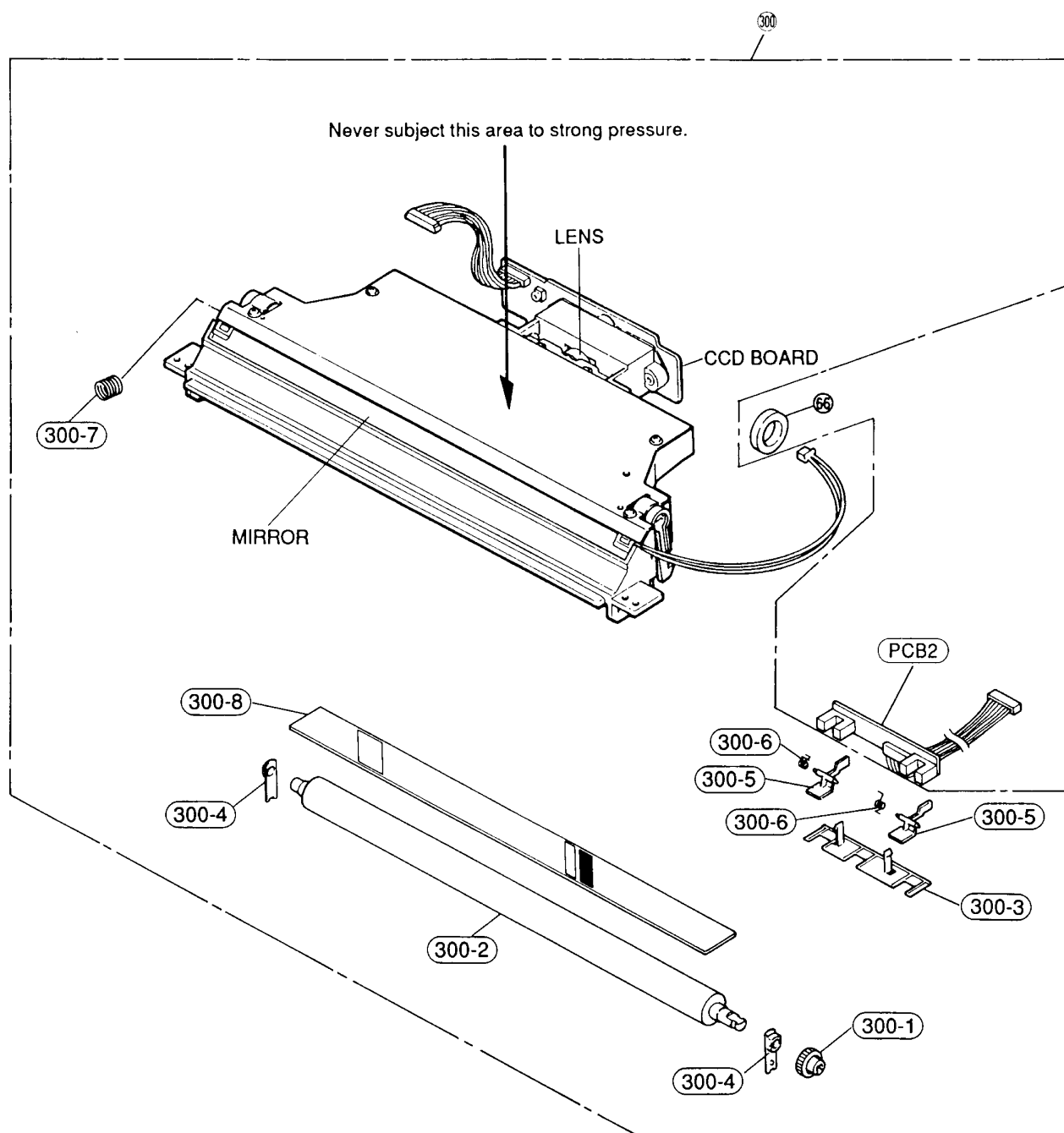






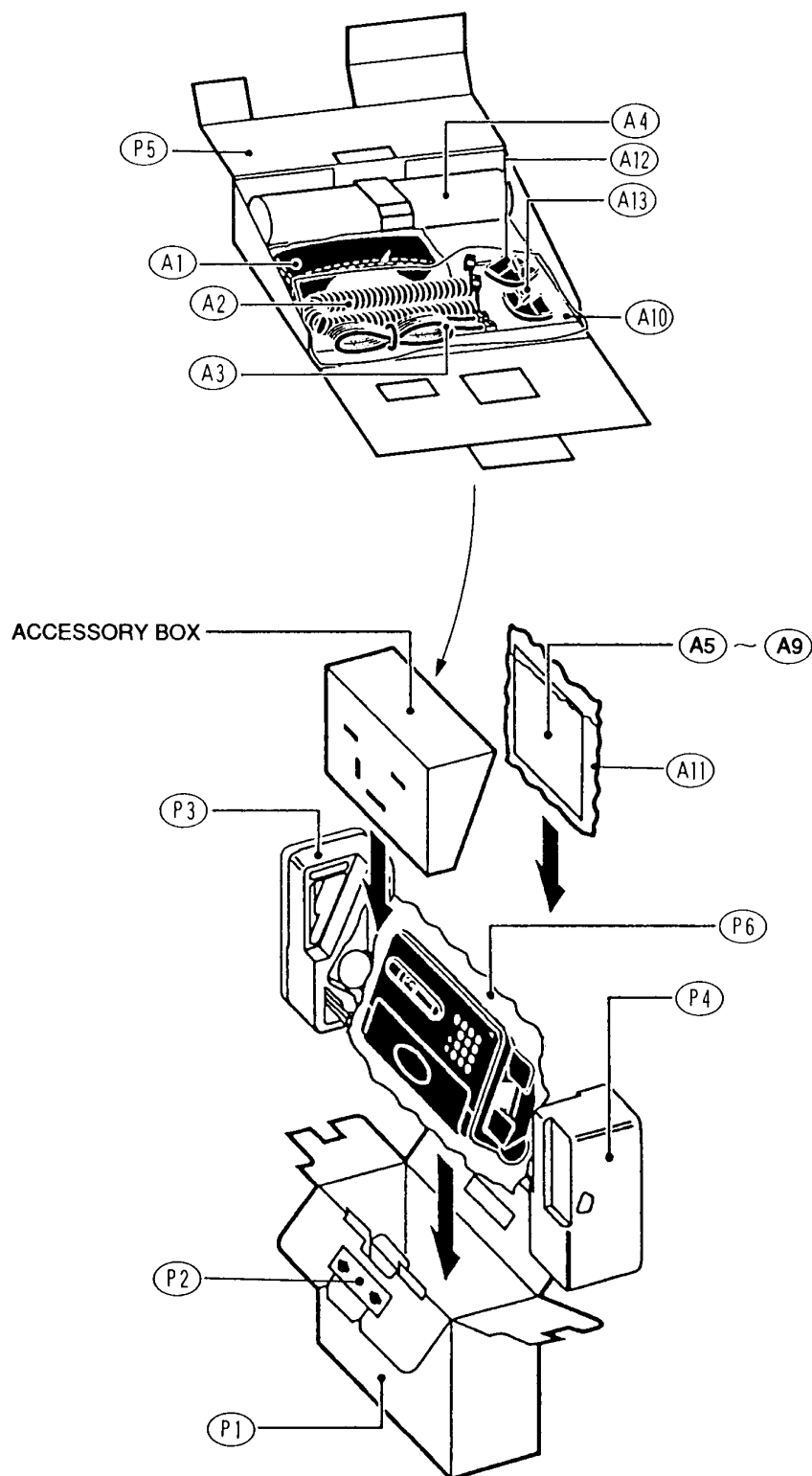




**Note:**

Be careful not to move the lens, mirror, or the CCD board, etc. Otherwise, the CCD will be out of adjustment.

## ACCESSORIES AND PACKING MATERIALS



This Replacement List is Taiwan version only.  
Refer to the simplified manual (cover) for other areas.

REPLACEMENT PARTS LIST				Ref. No.	Part No.	Part Name & Description	Pcs
Notes:				Model KX-F76			
1. RTL (Retention Time Limited)				42	PQQT10213Z	CAUTION LABEL-B	1
The marking (RTL) indicates that the Retention Time is limited for this item.				43	PQHP506Z	CARD, TEL.	1
After the discontinuation of this assembly In production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and In accordance with the laws governing part and product retention.				44	PQHR518Z	TRANSPARENT PLATE, TEL. CARD	1
After the end of this period, the assembly will no longer be available.				45	PQAS5P05Y	SPEAKER	1
2. Important safety notice				46	PQJE10009Z	FLAT CABLE, 9P	1
Components identified by the $\Delta$ mark special characteristics important for safety.				47	PQJE10010Z	FLAT CABLE, 13P	1
When replacing any of these components, use only manufacturer's specified parts.				48	PQJS2L103Z	CONNECTOR, 2P	1
3. The S mark indicates service standard parts and may differ from production parts.				49	PQHR10044Z	COVER	1
4. RESISTORS & CAPACITORS				50	PQMH10006Z	ANGLE	1
Unless otherwise specified,				51	PQBD10005Z	KNOB, VOLUME	1
All resistors are in ohms ( $\Omega$ ) K=1000 $\Omega$ , M=1000K $\Omega$				53	PQBH10005Z	KNOB, HOOK	1
All capacitors are in MICRO FARADS ( $\mu$ F ) P= $\mu$ F				54	PQKM10010Z	HANDSET CRADLE, UPPER	1
*Type &Wattage of Resistor				55	PQYM2F76XTW	HANDSET CRADLE ASS'Y, LOWER	1
Type				60	PQZU1KXPW1	METAL PLATE, RECORDING PAPER COVER LOCK	1
ERC: Solid				61	PQZLKXPW1	LEVER, SENSOR	1
ERD: Carbon				62	PQJS9M44Y	CONNECTOR, 9P	1
PQRD: Chip				63	PQJS10M48Z	CONNECTOR, 10P	1
ERX: Metal Film				64	PQWEKXPW1	THERMAL HEAD ASS'Y	1
ERG: Metal Oxide				65	PQUS299Z	SPRING, THERMAL HEAD	1
ERO: Metal Film				66	PQLB1E1	CORE	2
ERF: Cement Resistor				67	PQZU2KXPW1	ANGLE, RECORDING COVER LOCK	1
Wattage				68	PQZEKXPW1	GEAR CHASSIS ASS'Y	1
10, 16: 1/8W				69	PQJS12R24Y	CONNECTOR, 12P	1
14, 25: 1/4W				70	PQJS4M33Z	CONNECTOR, 4P	1
12: 1/2W				71	XUC25FY	RETAINING RING	1
1: 1W				72	PQUS10004Z	SPRING	1
2: 2W				73	PQMX10003Z	INSULATOR SHEET	1
3: 3W				74	PQJE10008Z	FLAT CABLE, 18P	1
Type				75	PQNP10001Z	WASHER	1
ECFD: Semi-Conductor				76	PQHR10004Z	SPACER, IMAGE BOARD	1
ECQS: Styrol				77	PQHR10006Z	BAND, LEAD WIRE	1
PQCUV: Chip				78	PQJE10011Z	FLAT CABLE, 8P	1
ECQMS: Mica				79	PQJE10004Z	FLAT CABLE, 10P	2
ECCD, ECKD, ECBT, PQCBC: Ceramic				80	PQJS06R23Z	CONNECTOR, 6P	1
ECQE, ECQV, ECQG: Polyester							
ECEA, ECSZ: Electrolytic							
ECQP: Polypropylene							
Voltage							
ECQ Type							
ECQG Type							
ECSZ Type							
Others							
1H: 50V							
05: 50V							
0F: 3.15V							
0J: 6.3V							
1V: 35V							
50, 1H: 50V							
1A: 10V							
1A: 10V							
1C: 16V							
1J: 63V							
0J: 6.3V							
1E, 25: 25V							
2A: 100V							
Ref. No.	Part No.	Part Name & Description	Pcs				
CABINET, MECHANICAL AND ELECTRICAL PARTS							
1	PQKE114W	DOCUMENT TRAY	1				
2	PQYM1F76XTW	UPPER CABINET ASS'Y	1				
2-1	PQHR9711Y	COVER, GUIDE	1				
2-2	PQHR9710Z	GUIDE-R	1				
2-3	PQHR9709Z	GUIDE-L	1				
2-4	PQDG5078Z	GEAR	1				
3	PQUV126W	COVER, OPERATION PANEL	1				
4	PQUP10098Z	FLEXIBLE CABLE	1				
5	PQHR9729Y	PLASTIC PARTS, BUTTON	1				
6	PQBCX250Z	BUTTON, FUNCTION	1				
7	PQBC334T	BUTTON, START	1				
8	PQBC335T	BUTTON, STOP	1				
9	PQYGF76XTW	OPERATION PANEL ASS'Y	1				
10	PQHM174Z	ARM-R	1				
11	PQHM175Z	ARM-L	1				
12	PQUS10002Y	SPRING, ARM	1				
13	PQBCX10004Z	BUTTON, DIAL	1				
14	PQBCX10007Z	BUTTON, PAUSE/REDIAL	1				
15	PQBC10019Z	BUTTON, MONITOR	1				
16	PQGP10006Z	COVER, LED	3				
17	PQGK10004Y	ORNAMENT	1				
18	PQNW368Y	WASHER	1				
19	PQQT10214Z	CAUTION LABEL-A	1				
30	PQUV125Y	COVER, RECORDING PAPER	1				
31	PQMD2024X	ANGLE	1				
32	PQDN32Z	ROLLER, RECORDING PAPER FEED	1				
33	PQHR9718Z	SPACER, RECORDING PAPER ROLLER	2				
34	PQDG5075Z	GEAR	1				
35	PQMD2029X	ANGLE, BOTTOM	1				
36	PQYFF76XTW	LOWER CABINET ASS'Y	1				
37	PQWAF76XTW	POWER CORD ASS'Y	1				
38	PQYTKXPW1	KNOB, RECORDING PAPER COVER OPEN	1				
39	PQBD183Y	KNOB, FRONT LID OPEN	1				
40	PQGP155Z	PANEL, RECORDING PAPER	1				
41	PQGT10246Z	NAME PLATE	1				

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

Ref. No.	Part No.	Part Name & Description	Pcs	Ref. No.	Part No.	Part Name & Description	Pcs
MAIN BOARD PARTS							
PCB1	PQWP1F76XTW	MAIN BOARD ASSY (RTL)	1	SW1	PQSS3B10W	(SWITCHES) SWITCH, RINGER	1
				SW2	PQSS2A27W	SWITCH, PROGRAM	1
				SW3	PQSS2A27W	SWITCH, PAPER SAVE	1
		(ICs)				(TRANSFORMERS)	
IC1	PQVIR96MFXS	IC	1	T1	ETA14Y85AY	COMMUNICATION TRANSFORMER	1
IC2	PQVIZ8400L8V	IC	1	T2	PQLT8F5A	DTMF TRANSFORMER	1
IC3	PQWIF76XTW	IC	1			(CRYSTAL OSCILLATORS & CERAMIC FILTER)	
IC4, 5	PQVICX5864MC	IC	2	X1	PQVCJ2400N9Z	CRYSTAL OSCILLATOR	1
IC6	PQVIE58R55F	IC	1	X2	PQVCJ1600N9Z	CRYSTAL OSCILLATOR	1
IC7	PQVIRIP5C62	IC	1	X3	PQVCL3276N6Z	CRYSTAL OSCILLATOR	1
IC8	PQVIM5195BL	IC	1	X4	PQVBT4.19G2	CERAMIC FILTER	1
IC9	PQVITC4053BF	IC	1			(CAPACITORS)	
IC10, 11, 12	PQVINJM082BM	IC	3	C1	ECQE2E224JZ	0.22	1
IC14	PQVIBA12003	IC	1	C2	ECEA1HN3R3S	3.3	1
IC15	PQVI672191F	IC	1	C3	ECEA1HU3R3	3.3	1
IC16	PQVINJM2901M	IC	1	C4	ECEA1HU100	10	1
IC17	PQVIMT3274AE	IC	1	C5	PQCUV1C683MD	0.068	1
IC19	PQVIPD7HU04S	IC	1	C6	PQCUV1H151JC	150P	1
IC20	PQVIPD7H245G	IC	1	C9	PQCUV1H221JC	220P	1
IC21-26	PQVINJM4558M	IC	6				
IC27	PQVITC4053BF	IC	1				
		(TRANSISTORS)					
Q1	2SB1322	TRANSISTOR(SI)	1	C10	PQCUV1E104MD	0.1	1
Q2, 21	2SB1218A	TRANSISTOR(SI)	2	C11	PQCUV1H101JC	100P	1
Q22, 23, 24	PQVTDTC143E	TRANSISTOR(SI)	3	C12	PQCUV1E104MD	0.1	1
Q25	2SB1218A	TRANSISTOR(SI)	1	C13	PQCUV1E104MD	0.1	1
Q26-31	2SD1819A	TRANSISTOR(SI)	6	C14	PQCUV1H151JC	150P	1
Q32, 33	2SB1322	TRANSISTOR(SI)	2	C15	PQCUV1E104MD	0.1	1
Q34, 36-39	PQVTDTC143E	TRANSISTOR(SI)	5	C16	PQCUV1H101JC	100P	1
Q40	2SB1322	TRANSISTOR(SI)	1				
Q42, 43	2SD1994A	TRANSISTOR(SI)	2	C21	PQCUV1E224MD	0.22	1
Q50	PQVTDTC143E	TRANSISTOR(SI)	1	C22	PQCUV1H331JC	330P	1
Q50A	2SC2235	TRANSISTOR(SI)	1	C23	PQCUV1E104MD	0.1	1
Q51	PQVTDTA114YU	TRANSISTOR(SI)	1	C24	PQCUV1H101JC	100P	1
Q53, 54	2SD1819A	TRANSISTOR(SI)	2	C25	PQCUV1H102J	0.001	1
		(DIODES)		C26	ECEA1HN3R3S	3.3	1
D1	PQVDSSV3SS	DIODE(SI)	1	C51	PQCUV1E104MD	0.1	1
D2	RLS71	DIODE(SI)	1	C52	PQCUV1H103KB	0.01	1
D3	PQVDHVS2B1	DIODE(SI)	1	C53	PQCUV1H103KB	0.01	1
D5, 6	RLS71	DIODE(SI)	2	C54	PQCUV1E104MD	0.1	1
D8	PQVDHVS2B1	DIODE(SI)	1	C56	PQCUV1E104MD	0.1	1
				C57	PQCUV1E104MD	0.1	1
D21	MA700A	DIODE(SI)	1	C58	PQCUV1E104MD	0.1	1
D22	MA4051	DIODE(SI)	1	C59	PQCUV1E104MD	0.1	1
D23	RLS71	DIODE(SI)	1				
D24	PQVDHVS3A1	DIODE(SI)	1	C60	PQCUV1E104MD	0.1	1
D25-29	RLS71	DIODE(SI)	5	C61	PQCUV1H120JC	12P	1
D30	1SS147	DIODE(SI)	1	C62	PQCUV1H120JC	12P	1
D31	MA7200	DIODE(SI)	1	C63	PQCUV1H180JC	18P	1
D34-37	RLS71	DIODE(SI)	4	C64	PQCUV1H180JC	18P	1
D38	MA723	DIODE(SI)	1	C65	PQCUV1E104MD	0.1	1
				C66	ECEA1HU4R7	4.7	1
D41	PQVDHVS2B1	DIODE(SI)	1	C67	ECUV1H334ZF	0.33	1
D43	RLS71	DIODE(SI)	1	C68	PQCUV1E104MD	0.1	1
D44, 45	MA723	DIODE(SI)	2	C69	PQCUV1E104MD	0.1	1
D51	PQVDS1YB40F1	DIODE(SI)	1	C70	ECUV1H334ZF	0.33	1
				C72	ECEB0JU220	22	1
				C73	ECUV1H334ZF	0.33	1
				C74	PQCUV1H102J	0.001	1
				C75	PQCUV1E104MD	0.1	1
PC1	PQVIPC814K	(PHOTO ELECTRIC TRANSDUCERS) PHOTO COUPLER	1	C76	PQCUV1E104MD	0.1	1
PC2, 3	PQVIPC817CD	PHOTO COUPLER	2	C77	PQCUV1H102J	0.001	1
				C78	PQCUV1H331JC	330P	1
				C79	PQCUV1E104MD	0.1	1
		(RELAYS)					
RLY1	PQSL76Z	RELAY	1	C80	PQCUV1E104MD	0.1	1
RLY2	PQSL112Z	RELAY	1	C81	PQCUV1H103KB	0.01	1
				C82	PQCUV1H103KB	0.01	1

Ref. No.	Part No.	Value	Pcs	Ref. No.	Part No.	Value	Pcs
C83	PQCUV1E104MD	0.1	1	R1	ERDS1TJ473	(RESISTORS)	1
C85	PQCUV1H330JC	33P	1	R3	ERDS2TJ120	12	1
C86	PQCUV1H180JC	18P	1	R4	PQ4R10XJ103	10K	1
C87	PQCUV1E473MD	0.047	1	R5	PQ4R10XJ103	10K	1
C88	PQCUV1E104MD	0.1	1	R6	PQ4R10XJ683	68K	1
C89	ECEA1EU470	47	S 1	R7	PQ4R10XJ561	560	1
C90	PQCUV1E104MD	0.1	1	R8	PQ4R10XJ682	6.8K	1
C91	PQCUV1E104MD	0.1	1	R9	ERDS2TJ560	56	1
C92	PQCUV1E104MD	0.1	1				
C93	PQCUV1E104MD	0.1	1	R10	PQ4R10XJ103	10K	1
C94	PQCUV1H103KB	0.01	1	R11	PQ4R10XJ473	47K	1
C95	PQCUV1E104MD	0.1	1	R12	PQ4R10XJ103	10K	1
C96	PQCUV1E104MD	0.1	1	R13	PQ4R10XJ104	100K	1
C97	PQCUV1E104MD	0.1	1	R14	PQ4R10XJ124	120K	1
C98	PQCUV1E104MD	0.1	1	R15	PQ4R10XJ104	100K	1
C99	PQCUV1E104MD	0.1	1	R16	PQ4R10XJ104	100K	1
				R17	PQ4R10XJ104	100K	1
C100	PQCUV1H101JC	100P	1	R18	PQ4R10XJ124	120K	1
C101	PQCUV1E104MD	0.1	1	R19	PQ4R10XJ122	1.2K	1
C102	PQCUV1E104MD	0.1	1				
C103	PQCUV1H101JC	100P	1	R20	PQ4R10XJ223	22K	1
C104	PQCUV1H103KB	0.01	1	R21	PQ4R10XJ473	47K	1
C105	ECEA1EU101	100	S 1	R22	PQ4R10XJ564	560K	1
C106	PQCUV1H682KB	0.0068	1	R23	PQ4R10XJ473	47K	1
C107	PQCUV1E104MD	0.1	1	R24	PQ4R10XJ394	390K	1
C108	PQCUV1E104MD	0.1	1	R25	PQ4R10XJ473	47K	1
C109	PQCUV1E104MD	0.1	1	R26	PQ4R10XJ564	560K	1
				R27	PQ4R10XJ223	22K	1
C111, 115, 116	PQCUV1E104MD	0.1	3	R29	PQ4R10XJ682	6.8K	1
C118	ECEA1VU221	220	1				
C119	ECEA1EU101	100	S 1	R30	PQ4R10XJ684	680K	1
				R31	PQ4R10XJ563	56K	1
C120	ECEA1AU221	220	S 1	R32	PQ4R10XJ104	100K	1
C121	ECEA1EU101	100	S 1	R33	PQ4R10XJ222	2.2K	1
C122	PQCUV1E104MD	0.1	1	R34	PQ4R10XJ184	180K	1
C123	PQCUV1E104MD	0.1	1	R35	PQ4R10XJ563	56K	1
C124	PQCUV1E104MD	0.1	1	R36	PQ4R10XJ563	56K	1
C125, 127	PQCUV1E104MD	0.1	2	R37	PQ4R10XJ473	47K	1
C131	PQCUV1E224MD	0.22	1	R43,	PQ4R10XJ104	100K	1
C132	PQCUV1C683MD	0.068	1	R44, 45, 46	PQ4R10XJ103	10K	3
C136	PQCUV1E104MD	0.1	1				
C137	PQCUV1E104MD	0.1	1	R51	PQ4R10XJ103	10K	1
C138	PQCUV1E104MD	0.1	1	R52	PQ4R10XJ475	4.7M	1
C139	PQCUV1E104MD	0.1	1	R53	PQ4R10XJ331	330	1
				R55	PQ4R10XJ000	0	1
C140	PQCUV1E104MD	0.1	1	R56	PQ4R10XJ222	2.2K	1
				R57	PQ4R10XJ472	4.7K	1
C155	PQCUV1H681JC	680P	1	R58	PQ4R10XJ472	4.7K	1
C156	PQCUV1E224MD	0.22	1	R59	PQ4R10XJ103	10K	1
C157	PQCUV1E104MD	0.1	1				
C158	PQCUV1E104MD	0.1	1	R60	PQ4R10XJ333	33K	1
C159	PQCUV1E104MD	0.1	1	R61	PQ4R10XJ103	10K	1
				R62	PQ4R10XJ473	47K	1
C162	PQCUV1H103KB	0.01	1	R63	ERD25TJ120	12	1
C163	PQCUV1E104MD	0.1	1	R64	ER016CKF8662	86.6K	1
C164	PQCUV1E104MD	0.1	1	R65	PQ4R10XJ563	56K	1
C165	PQCUV1H150JC	15P	1	R66	PQ4R10XJ275	2.7M	1
C166	PQCUV1E104MD	0.1	1	R67	ER016CKF8662	86.6K	1
C167	PQCUV1E473MD	0.047	1	R68	PQ4R10XJ272	2.7K	1
				R69	PQ4R10XJ683	68K	1
C172	PQCUV1H103KB	0.01	1	R70	ER016CKF1002	10K	1
C177	PQCUV1H332KB	0.0033	1	R71	ER016CKF3652	36.5K	1
C178	PQCUV1H103KB	0.01	1	R72	PQ4R10XJ332	3.3K	1
				R73	PQ4R10XJ332	3.3K	1
C200	PQCUV1E104MD	0.1	1	R74	ERD25TJ271	270	1
				R75	PQ4R10XJ222	2.2K	1
C600	ECEA1HU3R3	3.3	1	R76	PQ4R10XJ562	5.6K	1
C601	ECEA1HU100	10	1	R77	PQ4R10XJ222	2.2K	1
				R78	PQ4R10XJ472	4.7K	1
C1001	ECSTCM0JD686	68	1	R79	PQ4R10XJ154	150K	1
				R80	PQ4R10XJ152	1.5K	1
				R81	PQ4R10XJ000	0	1
				R82	PQ4R10XJ223	22K	1



Ref. No.	Part No.	Value	Pcs	Ref. No.	Part No.	Part Name & Description	Pcs
R83	PQ4R10XJ682	6.8K	1	R164	PQ4R10XJ101	100	1
R84	PQ4R10XJ471	470	1	R165	PQ4R10XJ682	6.8K	1
R85	PQ4R10XJ562	5.6K	1	R166	PQ4R10XJ103	10K	1
R86	PQ4R10XJ472	4.7K	1	R167	PQ4R10XJ000	0	1
R87	PQ4R10XJ103	10K	1				
R88	PQ4R10XJ332	3.3K	1	R171	PQ4R10XJ473	47K	1
R89	PQ4R10XJ182	1.8K	1	R172	PQ4R10XJ000	0	1
				R174	PQ4R10XJ473	47K	1
R90	PQ4R10XJ223	22K	1	R179	PQ4R10XJ331	330	1
R91	PQ4R10XJ331	330	1				
R92	PQ4R10XJ331	330	1	R180	PQ4R10XJ331	330	1
R93	PQ4R10XJ331	330	1	R181	PQ4R10XJ331	330	1
R94	PQ4R10XJ331	330	1	R182	PQ4R10XJ562	5.6K	1
R95	PQ4R10XJ103	10K	1	R183	PQ4R10XJ153	15K	1
R96	PQ4R10XJ332	3.3K	1	R185	PQ4R10XJ122	1.2K	1
R97	PQ4R10XJ332	3.3K	1	R186	PQ4R10XJ471	470	1
R98	ERDS1TJ122	1.2K	1	R187	PQ4R10XJ471	470	1
R99	PQ4R10XJ222	2.2K	1	R189	ERDS1TJ330	33	1
R100	ERD25TJ331	330	1	R190	PQ4R18XJ152	1.5K	1
R101	PQ4R10XJ332	3.3K	1	R191	PQ4R18XJ473	47K	1
R102	PQ4R10XJ682	6.8K	1	R192	PQ4R10XJ564	560K	1
R103	PQ4R10XJ472	4.7K	1	R194	PQ4R10XJ331	330	1
R104	PQ4R10XJ103	10K	1	R197	PQ4R10XJ473	47K	1
R105	PQ4R10XJ101	100	1	R198	PQ4R10XJ104	100K	1
R106	PQ4R10XJ222	2.2K	1	R199	PQ4R10XJ331	330	1
R107	PQ4R10XJ182	1.8K	1				
R108	ER016CKF1201	1.2K	1	R201	PQ4R10XJ331	330	1
R109	PQ4R10XJ223	22K	1	R202	PQ4R10XJ331	330	1
				R203	PQ4R10XJ331	330	1
R110	PQ4R10XJ103	10K	1	R206	PQ4R10XJ223	22K	1
R111	PQ4R10XJ103	10K	1	R207	PQ4R10XJ102	1K	1
R112	ER016CKF1801	1.8K	1	R208	PQ4R10XJ334	330K	1
R113	PQ4R10XJ102	1K	1	R209	PQ4R10XJ222	2.2K	1
R114	PQ4R10XJ101	100	1				
R115	PQ4R10XJ151	150	1	R212	PQ4R10XJ103	10K	1
R116	PQ4R10XJ272	2.7K	1	R213	PQ4R10XJ331	330	1
R117	PQ4R10XJ272	2.7K	1	R214	PQ4R18XJ000	0	1
R118	ER016CKF1501	1.5K	1	R215	PQ4R10XJ471	470	1
R119	PQ4R10XJ222	2.2K	1	R216	PQLQR1ET	COIL	1
R120	ERDS1TJ222	2.2K	1	R221	PQ4R10XJ564	560K	1
R121	PQ4R10XJ102	1K	1	R222	PQ4R10XJ272	2.7K	1
R122	ERDS1TJ222	2.2K	1	R223	PQ4R10XJ183	18K	1
R123	PQ4R10XJ103	10K	1	R225	PQ4R18XJ000	0	1
R124	PQ4R10XJ103	10K	1				
R125	PQ4R10XJ681	680	1	R236	PQ4R10XJ103	10K	1
R126	PQ4R10XJ103	10K	1	R237	PQ4R10XJ330	33	1
R127	PQ4R10XJ103	10K	1	R238	PQ4R10XJ330	33	1
				R239	PQ4R10XJ471	470	1
R131	PQ4R10XJ473	47K	1				
R132	PQ4R10XJ473	47K	1	R240	PQ4R10XJ472	4.7K	1
R133	PQ4R10XJ473	47K	1	R241	PQ4R10XJ473	47K	1
R134	PQ4R10XJ473	47K	1	R242	PQ4R10XJ564	560K	1
R135	PQ4R10XJ563	56K	1				
R136	PQ4R10XJ682	6.8K	1	R500	PQ4R10XJ123	12K	1
R137	PQ4R10XJ563	56K	1	R501	PQ4R10XJ562	5.6K	1
R138	PQ4R10XJ563	56K	1				
R139	PQ4R10XJ682	6.8K	1				
						(BATTERY & CONNECTORS)	
R140	PQ4R10XJ331	330	1	BA1	BR2032/1HF1	LITHIUM BATTERY	1
R141	PQ4R10XJ331	330	1				
R142	PQ4R10XJ682	6.8K	1	CN1	PQJP13A12Z	CONNECTOR, 13P	1
R143	PQ4R10XJ563	56K	1	CN2	PQJS23X59Z	CONNECTOR, 23P	1
R144	PQ4R10XJ563	56K	1	CN3	PQJP8G100Z	CONNECTOR, 8P	1
R145	PQ4R10XJ682	6.8K	1	CN4	PQJP4G91Z	CONNECTOR, 4P	1
				CN5	PQJP2D121Z	CONNECTOR, 2P	1
R151	PQ4R10XJ683	68K	1	CN6	PQJP6D121Z	CONNECTOR, 6P	1
R154	PQ4R10XJ473	47K	1	CN7	PQJP9G30Z	CONNECTOR, 9P	1
R157	PQ4R10XJ473	47K	1	CN8	PQJP7G90Z	CONNECTOR, 7P	1
R158	PQ4R10XJ473	47K	1	CN9	PQJP7G100Z	CONNECTOR, 7P	1
R159	PQ4R10XJ473	47K	1	CN10	PQJP2G100Z	CONNECTOR, 2P	1
				CN11	PQJS18R02Z	CONNECTOR, 18P	1
R160	PQ4R10XJ681	680	1				
R161	PQ4R10XJ121	120	1	CN501, 502	PQJS10A01Z	CONNECTOR, 10P	2
R162	PQ4R10XJ271	270	1				
R163	PQ4R10XJ181	180	1				



Ref. No.	Part No.	Part Name & Description	Pcs	Ref. No.	Part No.	Part Name & Description	Pcs	
OPERATION BOARD PARTS				Q102	PQVTBB1A4A	TRANSISTOR(SI)	1	
PCB2	PQWP2F76XTW	OPERATION BOARD ASS'Y (RTL)	1	Q103	2SD1994A	TRANSISTOR(SI)	1	
		(DIODES)		Q105	2SB1218A	TRANSISTOR(SI)	1	
		LED	1	Q106, 107	2SD1819A	TRANSISTOR(SI)	S 2	
		LED2	1	Q108	PQVTBB1A4A	TRANSISTOR(SI)	1	
		LED3	1	Q109	PQVTDTA114YU	TRANSISTOR(SI)	1	
		LED4	1	Q110, 111	2SD1819A	TRANSISTOR(SI)	S 2	
		LED5	1	Q201	2SD1994A	TRANSISTOP(SI)	1	
			1					
				(PHOTO ELECTRIC TRANSDUCERS)				
				SENSOR,	S	4		
PC201, 203 .301, 303	PQVIPS4506	(SWITCHES)		D1, 2	1SS131	DIODE(SI)	2	
				D3	RLS71	DIODE(SI)	1	
				D4	1SS131	DIODE(SI)	1	
				D5, 10	RLS71	DIODE(SI)	2	
				D11	MA4300	DIODE(SI)	1	
				D12	MA4150	DIODE(SI)	1	
				D14	PQVD0R5G4B42	DIODE(SI)	1	
				D15	RLS71	DIODE(SI)	1	
				D105, 106, 107 .110	RLS71	DIODE(SI)	4	
				D111	MA700A	DIODE(SI)	1	
SW1 SW2 SW3 SW4 SW5 SW6 SW7 SW8 SW9 SW10 SW11 SW12 SW13 SW14 SW15 SW16 SW17 SW18 SW19	EVQ22405K EVQ22405K EVQ22405K EVQ22405K EVQ22405K PQSH1A43Z PQSH1A43Z PQSH1A43Z PQSH1A43Z PQSH1A43Z PQSH1A43Z PQSH1A43Z PQSH1A43Z EVQ22405K PQSH1A43Z PQSH1A43Z PQSH1A43Z EVQ22405K	SWITCH,	1	D112	PQVDMTZ4R7	DIODE(SI)	1	
		SWITCH,	1	D113, 120, 121	RLS71	DIODE(SI)	3	
		SWITCH,	1	D124	1SS131	DIODE(SI)	1	
		SWITCH,	1	D126	PQVDMTZ5R6	DIODE(SI)	1	
		SWITCH,	1	D201	RLS71	DIODE(SI)	1	
		SWITCH,	1	D202	PQVDR LZ5R6	DIODE(SI)	1	
		SWITCH,	1	D203	RLS71	DIODE(SI)	1	
		SWITCH,	1	D204	PQVDAK04A	DIODE(SI)	1	
		SWITCH,	1					
		SWITCH,	1					
CN1, 2	PQJS7R40Z	(CONNECTORS)		L1, 2	PQLE106	(COILS) COIL	2	
		CONNECTOR, 7P	2	PC1	PQVIPC357C	(PHOTO ELECTRIC TRANSDUCERS) PHOTO COUPLER	1	
				PC101, 102, 103 .105, 106, 107 .108, 111, 112 .113	PQVIPC357C	PHOTO COUPLER	10	
TELEPHONE BOARD PARTS				RLY3	PQSL29Z	(RELAY) RELAY	1	
PCB3	PQWP3F76XTW	TELEPHONE BOARD PARTS (RTL)	1	SW1	PQSS2A27W	(SWITCHES) SWITCH, TONE/PULSE	1	
		(ICs)		SW2	PQSS2A27W	SWITCH, VOLUME	1	
		IC	1	SW3	ESE14A211	SWITCH, HOOK	1	
		IC2	1					
		IC3	1					
		IC101	1	T1	PQLT2D2A	(TRANSFORMERS) TRANSFORMER	1	
		IC102	1	T2	PQLT8D2A	TRANSFORMER	1	
		IC103	1	T201	PQLT9Z7A	TRANSFORMER	1	
				VR1	PQVAL204B24A	(VARIABLE RESISTOR) VOLUME CONTROL, 20KΩ (B)	S 1	
				X1	PQVBT3.58G8	(CERAMIC FILTER) CERAMIC FILTER	1	
Q3 Q4 Q5 Q6  Q11 Q12 Q13, 14 Q15	2SA1626 2SD662B PQVTDTC143E PQVTDTA114YU  2SD1819A PQVTDTC143E 2SD1819A PQVTDTC143E	TRANSISTOR(SI)	1	C1	ECQE2105KF	(CAPACITORS) 1	1	
		TRANSISTOR(SI)	1	C2	ECEA1HU220	22	1	
		TRANSISTOR(SI)	1	C4	PQCUV1H682KB	0.0068	1	
		TRANSISTOR(SI)	1	C5, 6	ECEA1HKS010	1	2	
				C7	PQCUV1H821JC	820P	1	
				C11	PQCUV1C224ZF	0.22	1	
				C12	PQCUV1E104MD	0.1	1	
				C13	PQCUV1H101JC	100P	1	

Ref. No.	Part No.	Value	Pcs	Ref. No.	Part No.	Value	Pcs
C14	PQCUV1E104MD	0.1	1	R7	PQ4R10XJ393	39K	1
C15	PQCUV1H272KB	0.0027	1	R8	PQ4R10XJ562	5.6K	1
C16	ECEA1CKS100	10	1	R9	PQ4R10XJ000	0	1
C17, 18	ECEA1AU101	100	S 2				1
C20	ECEA1HKS010	1	1	R10	PQ4R10XJ104	100K	1
C21	PQCUV1H102J	0.001	1	R11	PQ4R10XJ105	1M	1
C22	ECEA1HKS022	0.22	1	R12	PQ4R10XJ472	4.7K	1
C23	PQCUV1E104MD	0.1	1	R14	PQ4R10XJ683	68K	1
C25	PQCUV1C224ZF	0.22	1	R15	PQ4R10XJ564	560K	1
C26	PQCUV1E104MD	0.1	1	R17	PQ4R10XJ683	68K	1
C27	PQCUV1E104MD	0.1	1	R18	PQ4R10XJ472	4.7K	1
C30	PQCUV1H332KB	0.0033	1				1
C31	PQCUV1H103KB	0.01	1	R20	PQ4R10XJ182	1.8K	1
C102	ECEA1HKS047	0.47	1	R22	PQ4R10XJ222	2.2K	1
C103	PQCUV1C823KB	0.082	1	R23	PQ4R10XJ102	1K	1
C104	PQCUV1E153MD	0.015	1	R24	PQ4R10XJ103	10K	1
C105	PQCUV1H682KB	0.0068	1	R25	PQ4R10XJ821	820	1
C106	PQCUV1H471JC	470P	1	R26	PQ4R10XJ821	820	1
C107	PQCUV1E333MD	0.033	1	R27	PQ4R10XJ562	5.6K	1
C108	PQCUV1E333MD	0.033	1	R28	PQ4R10XJ223	22K	1
C109	PQCUV1H471JC	470P	1				1
C110	ECEA1CKS220	22	1	R30	PQ4R10XJ473	47K	1
C111	ECEA1CKS100	10	1	R31	PQ4R10XJ473	47K	1
C112, 113	ECEA1HKS4R7	4.7	S 2	R35	PQ4R10XJ474	470K	1
C114	PQCUV1H103KB	0.01	1	R36	PQ4R10XJ470	47	1
C121, 122	ECEA1HKS4R7	4.7	S 2	R37	PQ4R10XJ334	330K	1
C123	ECEA1AU221	220	S 1				1
C126	ECEA1HKS010	1	1	R40	PQ4R10XJ103	10K	1
C131	PQCUV1H103KB	0.01	1	R41	PQ4R10XJ000	0	1
C132	PQCUV1E104MD	0.1	1	R42	PQ4R10XJ103	10K	1
C133	PQCUV1E104MD	0.1	1	R43	PQ4R10XJ103	10K	1
C135	PQCUV1E104MD	0.1	1	R45	PQ4R10XJ103	10K	1
C136	PQCUV1E104MD	0.1	1	R48	PQ4R10XJ101	100	1
C139	PQCUV1H103KB	0.01	1	R49	PQ4R10XJ104	100K	1
C140	PQCUV1H101JC	100P	1				1
C141	PQCUV1H103KB	0.01	1	R50	PQ4R10XJ000	0	1
C143	ECEA1AU221	220	S 1	R51	PQ4R10XJ102	1K	1
C145	ECEA1HKS4R7	4.7	S 1	R52	PQ4R10XJ000	0	1
C147	PQCUV1H183MD	0.018	S 1	R53	PQ4R10XJ473	47K	1
C150	PQCUV1H103KB	0.01	1				1
C151	PQCUV1H103KB	0.01	1	R102	PQ4R10XJ222	2.2K	1
C152	PQCUV1H471JC	470P	1	R103	PQ4R10XJ102	1K	1
C155-162	PQCUV1H101JC	100P	8	R104	PQ4R10XJ470	47	1
C163	PQCUV1C224ZF	0.22	1	R105	PQ4R10XJ471	470	1
C165	PQCUV1E104MD	0.1	1	R106	PQ4R10XJ103	10K	1
C166	PQCUV1H102J	0.001	1	R109, 110	PQ4R10XJ153	15K	2
C167	PQCUV1H682KB	0.0068	1				1
C201	ECEA1AU101	100	S 1	R111	PQ4R10XJ204	200K	1
C202, 203, 204	PQCUV1H103KB	0.01	3	R112	PQ4R10XJ473	47K	1
C205	ECEA1HKS4R7	4.7	S 1	R113	PQ4R10XJ222	2.2K	1
C206, 209	PQCUV1H105JC	1	2	R114	ERDS1TJ560	56	1
C210	PQCUV1E104MD	0.1	1	R115	PQ4R10XJ103	10K	1
C210A	ECST1AX106	10	1	R118	PQ4R10XJ222	2.2K	1
C350	PQCUV1E104MD	0.1	1				1
		(RESISTORS)		R122	PQ4R10XJ271	270	1
J102	PQ4R10XJ000	0	2	R123	PQ4R10XJ000	0	1
J103	PQ4R18XJ000	0	1	R125	PQ4R10XJ104	100K	1
R1	ERDS1TJ622	6.2K	1	R126	PQ4R10XJ000	0	1
R2	PQ4R10XJ102	1K	1	R127	PQ4R10XJ155	1.5M	1
R3	PQ4R10XJ000	0	1	R128	PQ4R10XJ155	1.5M	1
R4	PQ4R10XJ123	12K	1	R129, 130	PQ4R10XJ104	100K	2
R5	PQ4R10XJ334	330K	1				1
R6	PQ4R10XJ184	180K	1	R131	PQ4R10XJ681	680	1
				R132	PQ4R10XJ473	47K	1
				R133	PQ4R10XJ222	2.2K	1
				R135	PQ4R10XJ104	100K	1
				R136	PQ4R10XJ472	4.7K	1
				R137	PQ4R10XJ000	0	1
				R139	PQ4R10XJ224	220K	1
							1
				R140	PQ4R10XJ472	4.7K	1
				R141	PQ4R10XJ103	10K	1
				R142	PQ4R10XJ472	4.7K	1
				R143, 144, 145	PQ4R10XJ104	100K	3
				R146, 147	PQ4R10XJ682	6.8K	2
				R148, 152	PQ4R10XJ000	0	2

Ref. No.	Part No.	Part Name & Description	Pcs	Ref. No.	Part No.	Part Name & Description	Pcs
R153	PQ4R10XJ472	4.7K	1	IMAGE BOARD PARTS			
R154	PQ4R10XJ000	0	1	PCB4	PQWP8PW1TNL	IMAGE BOARD ASS'Y (RTL)	1
R155	PQ4R10XJ824	820K	1	(ICs)			
R156	PQ4R10XJ104	100K	1	IC900	PQVICX5864MC	IC	S 1
R157	PQ4R10XJ564	560K	1	IC901	PQVI09JN003A	IC	S 1
R158	PQ4R10XJ271	270	1	IC902	PQVISN7H244S	IC	S 1
R159	PQ4R10XJ472	4.7K	1	IC903	PQVISN7H373S	IC	S 1
R161	PQ4R10XJ682	6.8K	1	IC904	PQVILC89066M	IC	1
R163	PQ4R10XJ682	6.8K	1	IC905	PQVITC7H404F	IC	1
R164	PQ4R10XJ682	6.8K	1	IC908	PQVITC7H00F	IC	S 1
R166	PQ4R10XJ104	100K	1	IC909	PQVIPD7HU04S	IC	1
R167	PQ4R10XJ104	100K	1	(COMPONENTS COMBINATIONS)			
R168	PQ4R10XJ224	220K	1	RA901	EXBF7E473JYV	RESISTOR ARRAY	1
R169	PQ4R10XJ224	220K	1	RA902	EXBF9E473JYV	RESISTOR ARRAY	1
R170	PQ4R10XJ152	1.5K	1	(CAPACITORS)			
R172	PQ4R10XJ392	3.9K	1	C901	ECEA1VKS4R7	4.7	1
R176	PQ4R10XJ102	1K	1	C903	PQCUV1H330JC	33P	1
R177	PQ4R10XJ102	1K	1	C904	PQCUV1H330JC	33P	1
R178	PQ4R10XJ104	100K	1	C906-912	PQCUV1E104MD	0.1	7
R179	PQ4R10XJ334	330K	1	C914	PQCUV1H221JC	220P	1
R180	PQ4R10XJ394	390K	1	C915	PQCUV1E104MD	0.1	1
R181	PQ4R10XJ103	10K	1	C916	PQCUV1E104MD	0.1	1
R182	PQ4R10XJ224	220K	1	(RESISTOR)			
R183	PQ4R10XJ104	100K	1	R913	PQ4R10XJ102	1K	1
R185	PQ4R10XJ224	220K	1	(CONNECTORS)			
R187	PQ4R10XJ224	220K	1	CN901, 902	PQJS10R03Z	CONNECTOR, 10P	2
R188	PQ4R10XJ104	100K	1	CN903	PQJS12X54Z	CONNECTOR, 12P	1
R189, 190	PQ4R10XJ332	3.3K	2	CN904	PQJS08R03Z	CONNECTOR, 8P	1
R191	PQ4R10XJ104	100K	1	POWER SUPPLY BOARD PARTS			
R192	PQ4R10XJ333	33K	1	PCB5	PQLP050Z	POWER SUPPLY BOARD ASS'Y (RTL)	1
R193	PQ4R10XJ682	6.8K	1	(ICs)			
R194	PQ4R10XJ222	2.2K	1	IC401	PQVIM51977P	IC	1
R195	PQ4R10XJ562	5.6K	1	IC402	PQVIUPC1093J	IC	S 1
R196	PQ4R10XJ102	1K	1	IC403	PQVINJ2360D	IC	S 1
R197	PQ4R10XJ102	1K	1	IC404, 405	PQVITA7812AP	IC	S 2
R201	PQ4R10XJ472	4.7K	1	(TRANSISTORS)			
R202	PQ4R10XJ223	22K	1	Q401	2SK1574	TRANSISTOR(SI)	1
R203	PQ4R10XJ471	470	1	Q404	PQVTDTC143XS	TRANSISTOR(SI)	1
R205	PQ4R10XJ102	1K	1	Q405	2SJ176	TRANSISTOR(SI)	1
R300	PQ4R10XJ000	0	1	Q406	2SD1266	TRANSISTOR(SI)	1
R310	PQ4R10XJ104	100K	1	(DIODES)			
R311	PQ4R10XJ000	0	1	D401	PQVDD3SBA40S	DIODE(SI)	△ 1
R315	PQ4R10XJ223	22K	1	D402	PQVD1JU41	DIODE(SI)	1
R316	PQ4R10XJ103	10K	1	D403	PQVD1GU42	DIODE(SI)	1
R317	PQ4R10XJ473	47K	1	D404	PQVD1GU42	DIODE(SI)	1
R318	PQ4R10XJ124	120K	1	D405	PQVDD10LC20U	DIODE(SI)	1
(JACK, CONNECTORS & OTHER)			1	D407	PQVD0R8DU41	DIODE(SI)	1
H/S JACK	PQJJ1TB18Z	HANDSET JACK	1	D408	PQVD1GU42	DIODE(SI)	1
CN1	PQJS9X54Z	CONNECTOR, 9P	1	D411	PQVDAK04	DIODE(SI)	1
CN2	PQJS13X54Z	CONNECTOR, 13P	1	ZD401	MA4270	DIODE(SI)	1
CN3	PQJP2D70Y	CONNECTOR, 2P	1	ZD402	MA4062	DIODE(SI)	1
CN4	PQJP06A14Z	CONNECTOR, 6P	1	(FUSES)			
CN101	PQJS9X54Z	CONNECTOR, 9P	1	F401	PQBA1C50NBKL	FUSE	△ 1
CN102	PQJS13X54Z	CONNECTOR, 13P	1	F402	PQBA1K31NMA	FUSE	1
CN103	PQJS18R02Z	CONNECTOR, 18P	1				
CN104	PQJS08R02Z	CONNECTOR, 8P	1				
E1	PQHX10069Z	SHEET	1				

Ref. No.	Part No.	Part Name & Description	Pcs	Ref. No.	Part No.	Part Name & Description	Pcs
L401, 402	ELF18D290	(COILS)		R412	ERDS1TJ181	180	1
L403	PQLE119	COIL	2	R413	ERDS2TJ331	330	1
L404-407	ELEXT5R6KA	CHOKE COIL	1	R414	ERDS2TJ331	330	1
		COIL	4	R415	ERDS2TJ273	27K	1
				R416	ERX3SJR10	0.1	1
				R417	ERX3SJ5R6	5.6	1
				R418	ERG2SJ221	220	1
PC401, 402	PQVIPC817K	(PHOTO ELECTRIC TRANSDUCERS)		R419	ER016CKF1002	10K	1
		PHOTO COUPLER	2	R420	ER016CKF1131	1.13K	1
				R421	ERG1SJ561	560	1
				R422	ERD25TJ472	4.7K	1
SA401	PQVDSAE310F1	(VARISTORS)		R423	ERD25TJ472	4.7K	1
SA402, 403	PQVDDSS301F	VARISTOR (SURGE ABSORBER)	1	R424	ER016CKF1201	1.2K	1
		VARISTOR (SURGE ABSORBER)	2	R425	ER016CKF3651	3.65K	1
Z401	ERZC10DK391U	VARISTOR	1	R426	ERDS1TJ101	100	1
Z402	ERZC10DK182	VARISTOR	1	R427	ERG2SJ122	1.2K	1
				R428	ERX1SJR22	0.22	1
				R440	ERDS2TJ121	120	1
TH401	PORTD5FFL8R0	(THERMISTORS)				(JACK & CONNECTORS)	
TH402	PORTE0FFF103	THERMISTOR	1	J401, 402	PQJ1TA14Y	TEL. JACK	2
		THERMISTOR	1				
T401	ETS28K800A	(TRANSFORMER)		CN401	PQJP2D98Z	CONNECTOR, 2P	1
		TRANSFORMER	1	CN402	PQJP10G43Z	CONNECTOR, 10P	1
				CN403	PQJP13A12Z	CONNECTOR, 13P	1
				CN404	PQJP4G91Z	CONNECTOR, 4P	1
				CN405	PQJP06A13Z	CONNECTOR, 6P	1
C401	ECQE1A224KF	0.22	1	LCD BOARD PARTS			
C402	ECKZRS222ME	0.0022	1	PCB6	PQLP036Y	LCD BOARD ASS'Y (RTL)	1
C403	ECKZRS222ME	0.0022	1				
C404	ECQE1A224KF	0.22	1	IC1	PQVIHD44780	(IC)	1
C405	ECKDRS332ME	0.0033	1				
C406	ECKDRS332ME	0.0033	1			(CAPACITORS)	
C407	ECQE6473B	0.047	1	C1	PQCUV1E104MD	0.1	1
C408	ECES2DA221CX	220	1	C2	ECUV1H104MD	0.1	1
C409	ECQV1H104JZ	0.1	1				
C410	ECQV1H103JZ	0.01	1				
C411	ECQB1H391KF	390P	1				
C412	ECQV1H154JZ	0.15	1				
C413	ECQV1H104JZ	0.1	1				
C414	ECQV1H104JZ	0.1	1				
C415	ECEA1VGE220	22	1				
C416	ECEA1VGE101	100	1				
C417	ECKZRS102ME	0.001	1	R1	PQ4R18XF9092	(RESISTORS)	1
C418	ECEA1VGE471	470	1	R2-6	PQ4R18XF8201	90.9K	5
C419	ECQV1H104JZ	0.1	1				
C420	ECEA1VGE471	470	1				
C421	ECQV1H104JZ	0.1	1				
C422	ECEA1VGE471	470	1				
C423	ECCD1H101JC	100P	1	E10	PQADCG794TSA	(OTHERS)	1
C424	ECQV1H104JZ	0.1	1	E11	PQJE134Z	LIQUID CRYSTAL DISPLAY	2
C425	ECEA1AGE102	1000	1	E12	PQMD91Z	CONNECTOR	1
C426	ECQV1H104JZ	0.1	1			FRAME	
C427	ECKD3A221KBN	220P	1				
C428	ECEA1HGE101	100	1				
C429	ECEA1EGE101	100	1				
C430	ECKD3A221KBN	220P	1				
C431	ECEA1VGE101	100	1				
C432	ECEA1EGE470	47	1				
C433	ECKD3A221KBN	220P	1				
C434	ECQV1H104JZ	0.1	1				
C435	ECQV1H104JZ	0.1	1				
C436	ECKD3A221KBN	220P	1				
C437	ECQV1H104JZ	0.1	1				
			</				